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# **TRAFFIC STUDY REPORT**

**For:**

**SR 118 (Los Angeles Avenue) at SR 34 (Somis  
Road and Donlon Road  
Intersection Improvement**

**EA 105960  
PM 10.72/11.8  
16.8/17.66**

June 2010

Prepared by:

California Department of Transportation  
District 7  
Office of Traffic Investigations

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## **I. Introduction:**

The purpose of this report is to perform a traffic analysis of the proposed improvements for SR 118 (Los Angeles Avenue) at SR 34 (Somis Road) and Donlon Road. The existing intersections now operate poorly due high volumes and limited queuing capacity. All four of the build alternatives merge these 2 T-intersections (1 currently signalized and 1 currently stop sign control) into a 4-leg intersection by realigning Donlon Road to a point opposite to Somis Road. All of the build alternatives also lengthen turn pockets to improve traffic operation and to increase the capacity of the intersection.

This intersection is located in the County of Ventura, in the community called Somis. SR 118 is a two-lane, east-west conventional highway and is one of the main east/west highways in Ventura County. SR 34 is a two-lane, north-south highway with its northern termini at SR 118 and forms the south leg of a three way intersection. Donlon Road is a low-volume county road that serves the residential area to north of Los Angeles Avenue. It connects to the SR 118 and forms a T-intersection to the north, and about 270 feet east of SR 34. See Attachment1 for a graphic.

## **II. Existing and Proposed Improvement Alternatives (Attachment 2):**

The T-intersection of SR 118 (Los Angeles Avenue) and SR 34 (Somis Road) is signalized with left turn pockets northbound and westbound. The stop control T-intersection of Donlon Road has a single lane southbound and a 30 foot long eastbound left turn pocket.

To improve the safety and operational efficiency of the intersection, Caltrans proposes to relocate Donlon Road opposite to SR 34 to form a 4-leg intersection. Five alternatives are under consideration to improve the operation of the intersection. They are:

- Alternative 1 - No-build;
- Alternative 2 - signalized intersection with Dual westbound left turn lanes;
- Alternative 3 - signalized intersection with a Single westbound left turn lane;
- Alternative 4 - Roundabout
- Alternative 5 - a southerly Bypass Alternative
- Alternative 6 - Donlon Rd bridge alternative (similar intersection and lane configuration as Alternative 2, except that the realignment of Donlon Rd. included a bridge over the creek before coming to the intersection.

The bypass road would realign SR 34 from about  $\frac{1}{2}$  mile south of 118 to about one mile east of the current intersection. Both new intersections would be signalized.

## **III. Traffic Analysis.**

1. Traffic count, Truck Traffic and Future Traffic Volume Projection (Attachment 3):

The 8-hour vehicle and pedestrian traffic count was conducted on September 30, 2008 for the hours from 6:00 a.m. to 9:00 a.m., from 11:00 a.m. to 1:00 p.m. and from 3:00 p.m. to 6:00 p.m. Data were analyzed and the results indicated that the peak hour for a typical day was from 3:30 p.m. to 4:30 p.m.

The 5 alternatives were analyzed for present condition (year 2008 traffic volume), future years 2015, and 2035. Future years 2015 and 2035 traffic volumes were projected based on the current traffic volume and provided by Office of Planning. Future truck traffic percents were assumed to remain the same as present condition.

## 2. Intersection Capacity Analysis:

### A. Data Used for the Analysis:

1. HCS software and Highway Design Manuals
2. Truck percentage:
  - Eastbound SR 118 = 25.6%
  - Westbound SR 118 = 19.9%
  - SR 34 = 14%
3. Field Traffic count data: 9/30/2008
4. Traffic signal cycles and timing and phasing (Attachment 4):
  - 1 traffic cycle = 244 seconds

### B. Analysis (Attachment 5):

The intersections were analyzed for Level of Services (LOS) and delays (in seconds) for all five alternatives plus volume to capacity ratio (v/c), or the measure of capacity sufficiency for Alternative 4, during both AM and PM in the three key design years.

Alternative 5 would align Donlon Road to opposite SR 34 and would have a by-pass road to bypass the SR 118/34/Donlon Road intersection. The by-pass road would be connected to SR 34 1700 feet south of the intersection of SR 118/34, then run northeast along the railroad track to SR 118, 2000 feet to the east of the existing SR 118/34 intersection. Both proposed new intersections would be signalized.

The Build-out Alternative is similar to Alternative 2 but would have 2 through lanes for both eastbound and westbound SR 118. This is not an alternative and is offering for comparison purposes.

The following is a summary.

|             |    | 2008 |              | 2015 |              | 2035 |              |
|-------------|----|------|--------------|------|--------------|------|--------------|
|             |    | LOS  | Delay or v/c | LOS  | Delay or v/c | LOS  | Delay or v/c |
| Alternate 1 | AM | F    | 108.0        | F    | 135.5        | F    | 267.5        |
| No Build    | PM | F    | 188.9        | F    | 194.9        | F    | 315.0        |

|              |    |   |      |   |      |   |      |
|--------------|----|---|------|---|------|---|------|
| Alternate 2  | AM | C | 29.0 | C | 28.9 | C | 31.6 |
| Dual Left    | PM | C | 29.6 | C | 30.7 | D | 35.8 |
| Alternate 3  | AM | C | 31.4 | C | 32.1 | D | 39.6 |
| Single Left  | PM | D | 35.3 | D | 36.7 | D | 52.1 |
| Alternate 4  | AM |   | 0.73 |   | 0.77 |   | 0.89 |
| Roundabout   | PM |   | 0.79 |   | 0.86 |   | 0.96 |
| Alternate 5  | AM | B | 19.4 | B | 16.4 | B | 17.3 |
| By Pass      | PM | D | 40.4 | B | 18.0 | B | 19.0 |
| Southerly    | AM | B | 13.6 | B | 13.8 | B | 14.4 |
| Intersection | PM | B | 12.3 | B | 12.5 | B | 13.2 |
| Easterly     | AM | C | 25.9 | C | 27.5 | C | 30.5 |
| Intersection | PM | C | 29.7 | C | 34.0 | C | 31.1 |
| Build out    | AM | C | 25.6 | C | 26.6 | C | 26.7 |
|              | PM | C | 25.3 | C | 26.8 | C | 29.5 |

C. Accident Rates (Attachment 6):

The accident rates of the most recent three-year period, from 4/1/2006 to 3/31/2009, for the intersection as compared to the statewide average are as follow:

| Actual |       | Statewide Average |       |
|--------|-------|-------------------|-------|
| Fatal  | Total | Fatal             | Total |
| 0.0    | 0.47  | 0.002             | 0.30  |

There were 14 accidents (1 injury accidents) within 250 feet of the intersection. The highway segment of SR 118 within the project limits, from PM 10.7 to PM 11.8, had 54 accidents (18 injury accidents) and has the following accident rates:

| Actual |       | Statewide Average |       |
|--------|-------|-------------------|-------|
| Fatal  | Total | Fatal             | Total |
| 0.0    | 2.68  | 0.025             | 0.77  |

The highway segment of SR 34 within the project limits, from PM 16.80 to PM 17.66, had 41 accidents (10 injury accidents) and has the following accident rates:

| Actual |       | Statewide Average |       |
|--------|-------|-------------------|-------|
| Fatal  | Total | Fatal             | Total |
| 0.0    | 3.29  | 0.016             | 1.35  |

D. Left Turn Lane Length Calculation (Attachment 7):

The highest left turn volume for westbound SR 118 was 480 vehicles in the a.m. peak hour. The highest left turn volume for eastbound SR 118 was 50, also during a.m. peak hour. The highest left turn volume for northbound SR 34 was 190 vehicles, and in the p.m. peak hour. These volumes were used and based on the Highway Design Manuals guidelines, the left turn lane length for each direction was calculated and the results are:

- Westbound left turn lane length: 1160 feet for a single left turn lane and 800 feet for dual left turn lanes.
- Eastbound left turn lane length: 530 feet.
- Northbound left turn lane length: 610 feet.

E. Comparison Between Single- and Dual-Left Turn Capacity:

On the average, it takes approximately 2.5 seconds (field timing) for a car and 5 seconds for a truck to complete the left turn movement through the intersection. Westbound truck volume percentage is 19.9%. The highest left turn volume, which is the a.m. volume, is used for the comparison.

Alternative 2 (dual left turn) provided 25 seconds for the left turn phase, while Alternative 3 (single left turn) provided 33 seconds.

Alternative 3 would have 9 cars and 2 trucks pass through:

$$9 \text{ cars} \times 2.5 \text{ seconds} = 22.5 \text{ seconds}$$

$$2 \text{ trucks} \times 5 \text{ seconds} = 10 \text{ seconds}$$

Alternative 2 (dual turn lane) would have 13 cars and 3 trucks pass through:

$$6.5 \text{ cars} \times 2.5 \text{ seconds} = 16.25 \text{ seconds}$$

$$1.5 \text{ trucks} \times 5 \text{ seconds} = 7.5 \text{ seconds}$$

Alternative 2, with shorter left turn time, would still have a 45% increased in left turn capacity per cycle over Alternative 3, from 11 vehicles to 16 vehicles.

**IV. Attachments:**

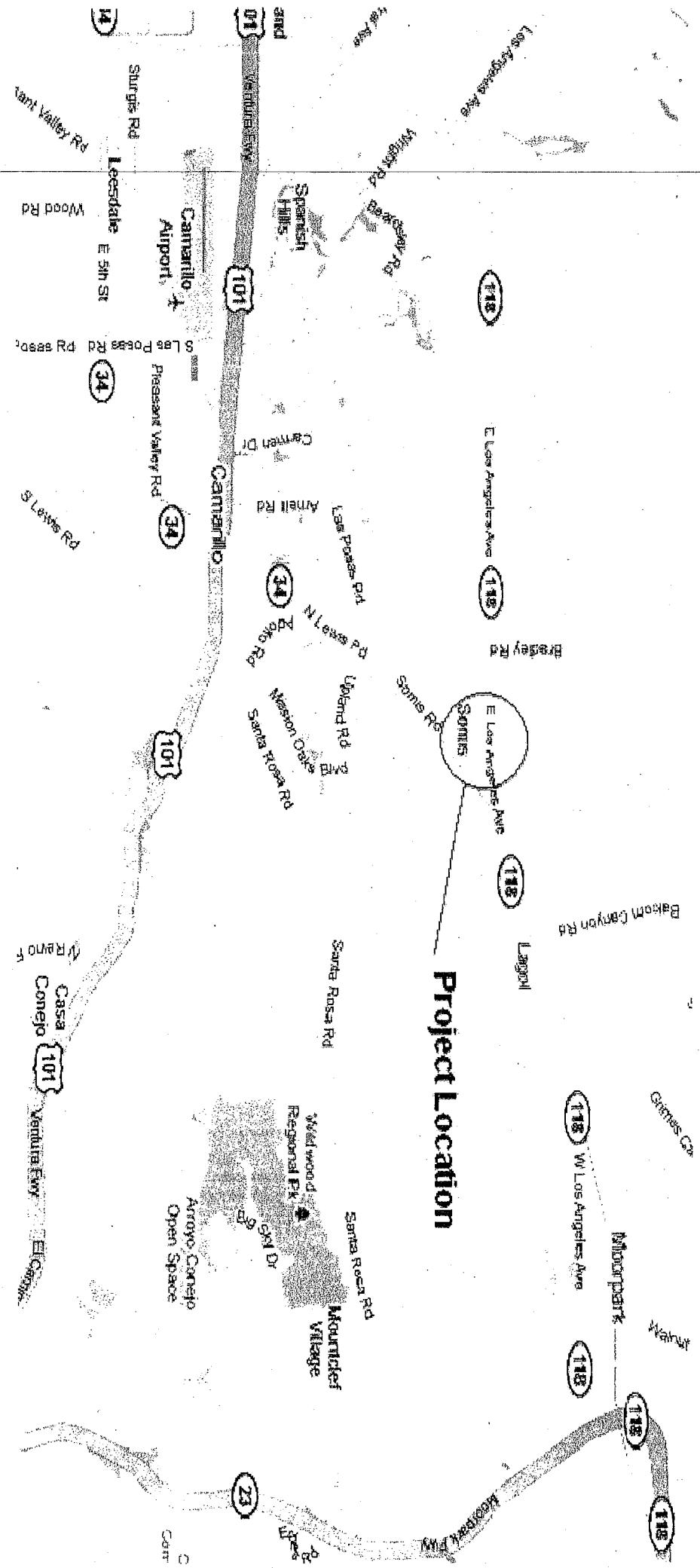
1. Project location map
2. Existing And Proposed Alternatives
3. Traffic Volume (Peak 8-hour vehicle/pedestrian count), Forecast Traffic Volumes for Year 2015 and 2035, and Truck Percent
4. Traffic Signal System
5. LOS and Delay Calculation for Existing Condition, Dual Left Turn Lane Alternative, Somis Community Alternative, Roundabout Alternative, and Bypass Alternative
6. TSAR/Table B (Most recent 3-year)
7. Proposed SR 118 And SR 34 Left Turn Lane Length Calculation

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**ATTACHMENT 1**

**PROJECT LOCATION**

### Project Location

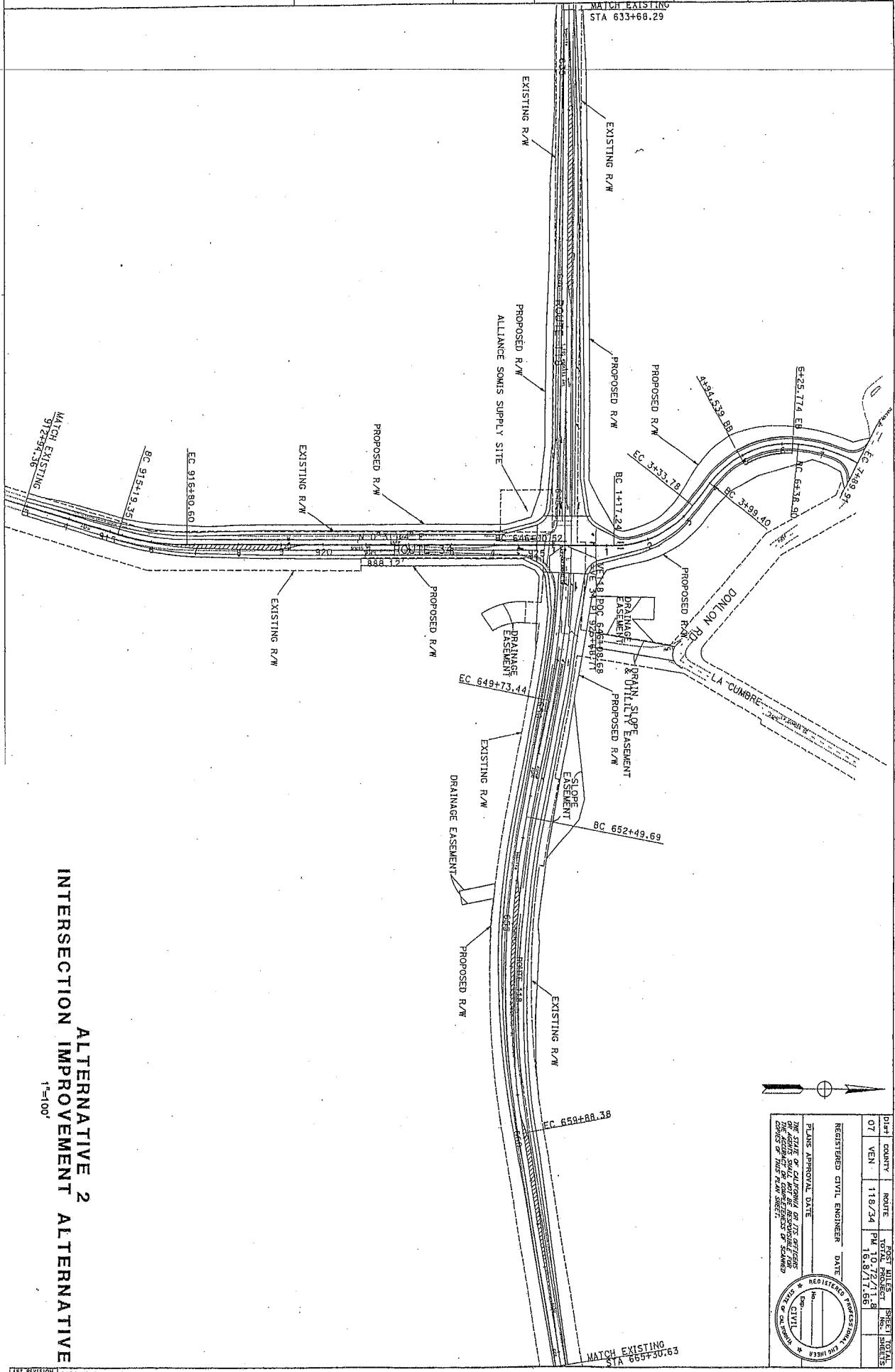


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**ATTACHMENT 2**

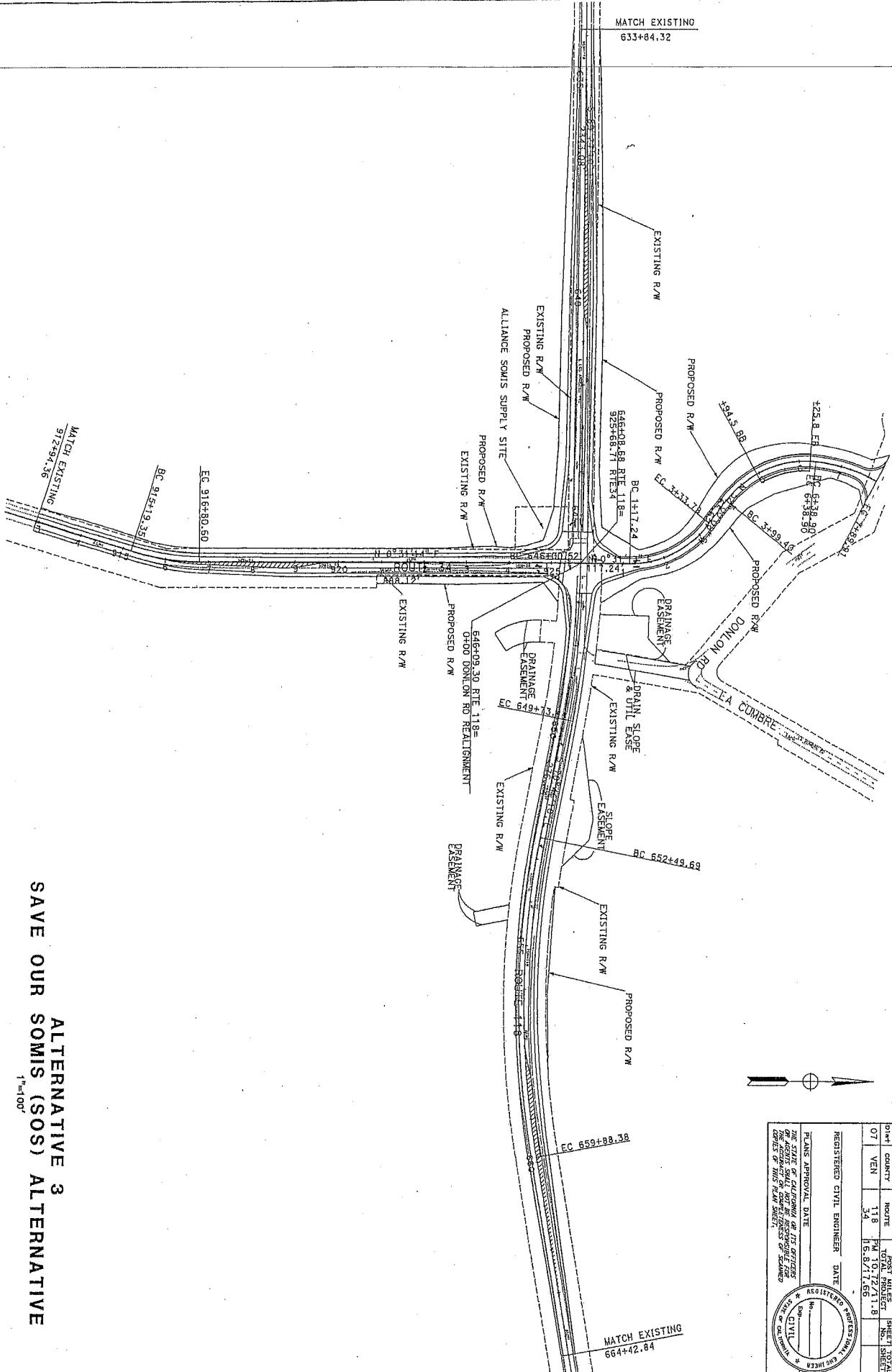
**PROJECT ALTERNATIVES**

|  |                       |                        |                                   |              |  |  |
|--|-----------------------|------------------------|-----------------------------------|--------------|--|--|
| STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | FUNCTIONAL SUPERVISOR | CALCULATED-DESIGNED BY |                                   | REVISED BY   |  |  |
| <i>Caltrans</i>                                    |                       | CHECKED BY             |                                   | DATE REVISED |  |  |
|  |                       |                        | 1 MATCH EXISTING<br>STA 813+68.29 |              |  |  |



## **INTERSECTION IMPROVEMENT ALTERNATIVE 2**

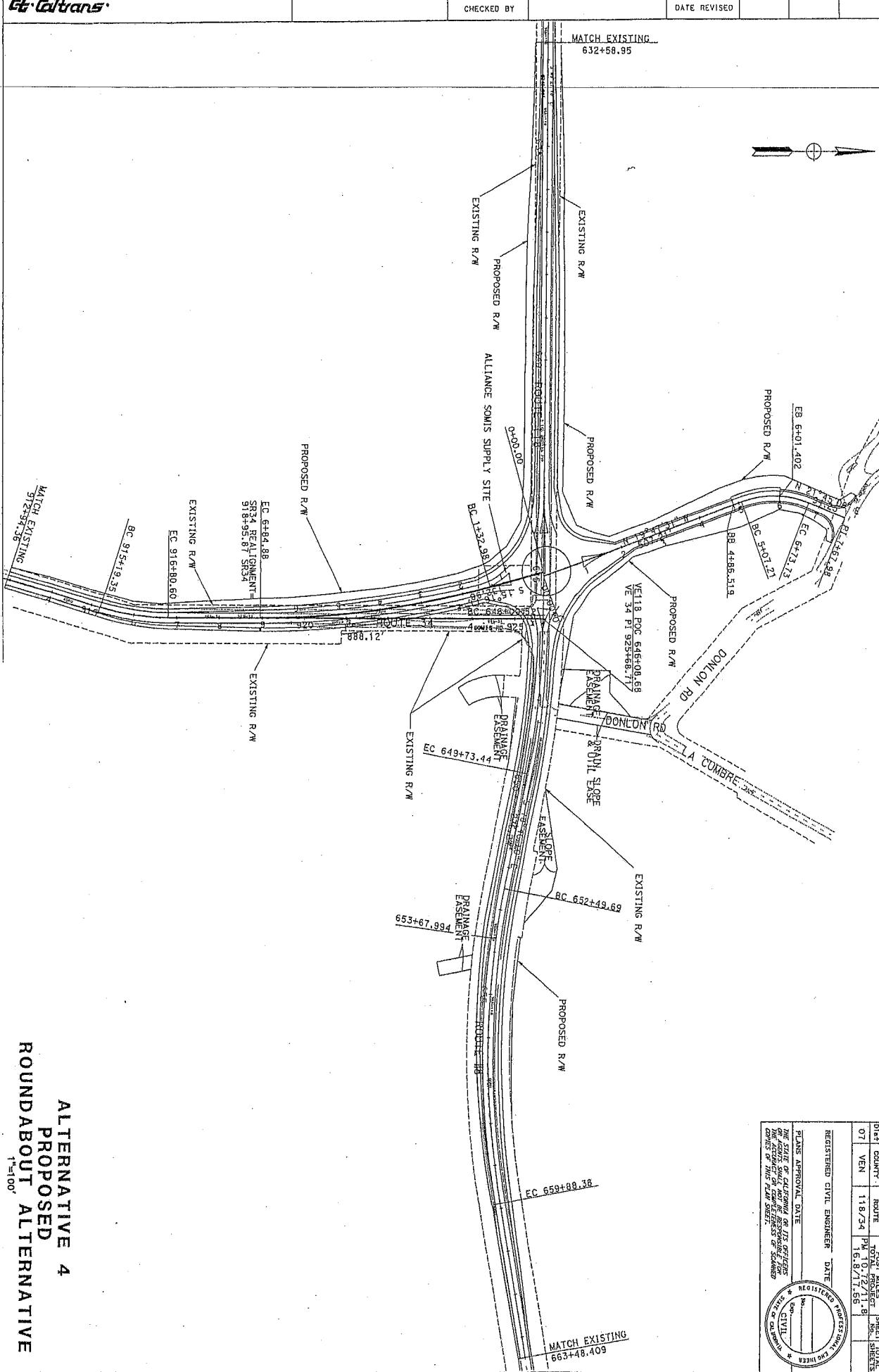
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|--|-----------------------|------------------------|--|--------------|--|
| STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | FUNCTIONAL SUPERVISOR | CALCULATED-DESIGNED BY |  | REVISED BY   |  |
| <i>Caltrans</i>                                    |                       | CHECKED BY             |  | DATE REVISED |  |



## **ALTERNATIVE 3 SAVE OUR SOMIS (SOS) ALTERNATIVE**

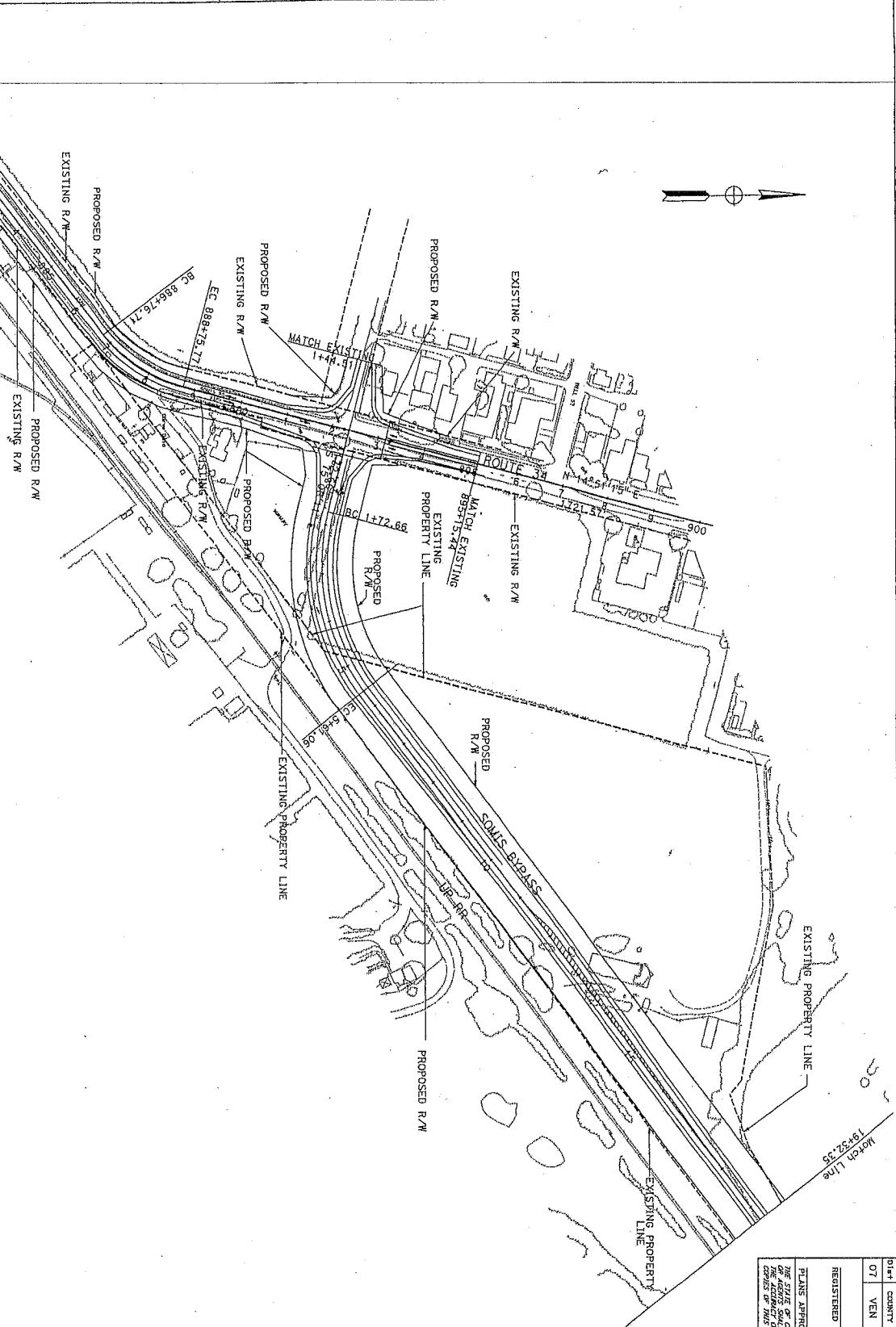
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

FUNCTIONAL SUPERVISOR

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DATE REVISED*Cultans*

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION      FUNCTIONAL SUPERVISOR      CALCULATED-DESIGNED BY      REVISED BY  
      CHECKED BY      DATE REVISED

*Ct. Caltrans*



| PLAT<br>NO. | COUNTY | ROUTE    | POST<br>MILES | TOTAL<br>PROJECT | SHEET<br>NO. | TOTAL<br>SHEETS |
|-------------|--------|----------|---------------|------------------|--------------|-----------------|
| 07          | VEN    | 118/3-34 | P.M.          | 10.2771-1.6      |              |                 |

REGISTERED CIVIL ENGINEER      DATE

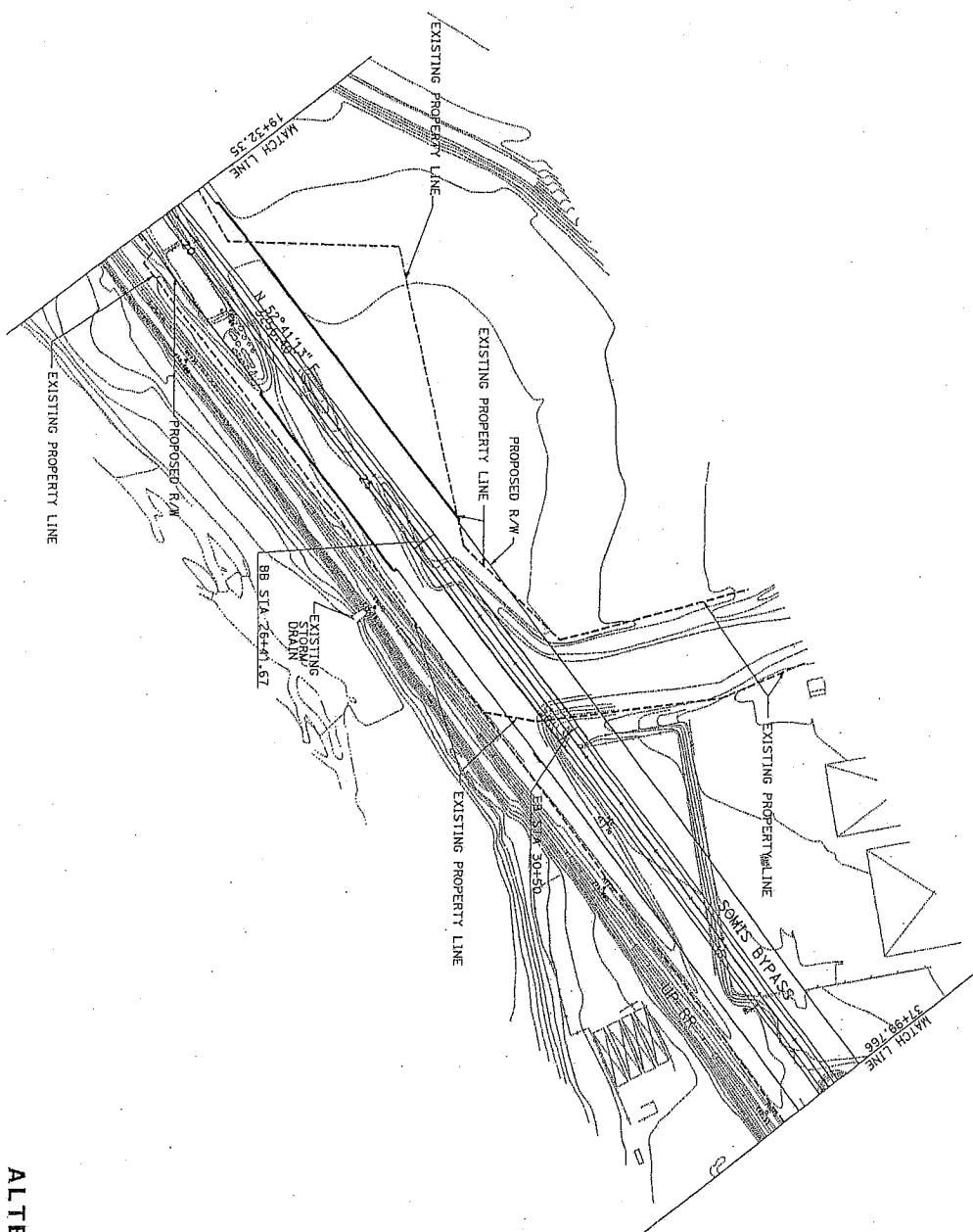
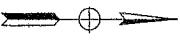
PLANS APPROVAL DATE

THE STATE OF OKLAHOMA OR ITS OFFICES  
OR EMPLOYEES SHALL NOT BE HELD LIABLE  
FOR ANY DAMAGE CAUSED BY THE USE  
OF THIS PLAT SHEET.

RECEIVED  
REGISTRATION  
No. \_\_\_\_\_  
Ex. \_\_\_\_\_

**ALTERNATIVE 5  
PROPOSED  
SOMIS BYPASS ALTERNATIVE**

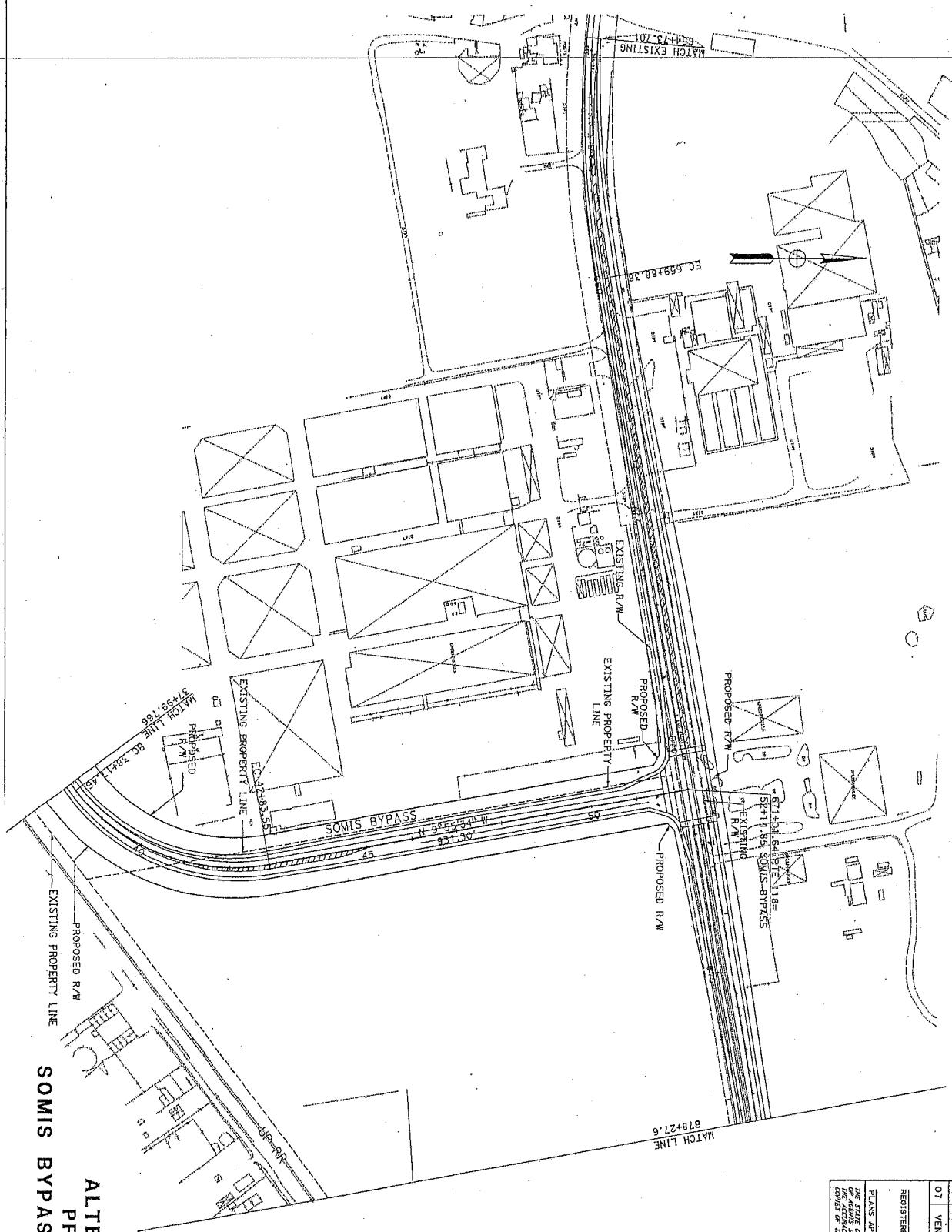
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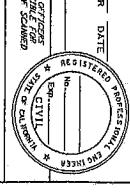
**ALTERNATIVE 5  
PROPOSED  
SOMIS BYPASS ALTERNATIVE**

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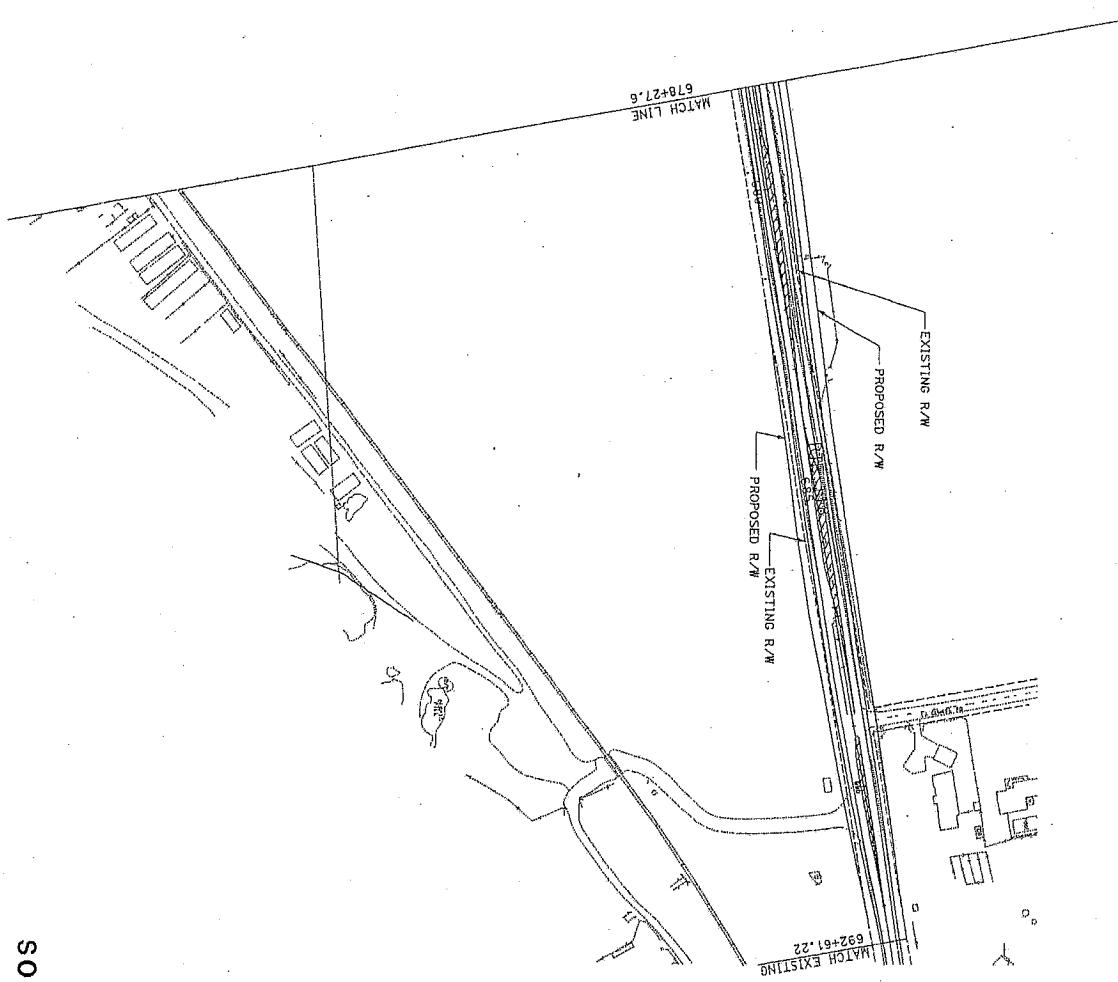
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| REGISTERED CIVIL ENGINEER  | DATE |
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| THE STATE OF CALIFORNIA GOES ON THIS APPROVED<br>THE DRAWINGS AND SPECIFICATIONS FOR THE<br>EFFECTIVENESS OF THE PLANS AND SPECIFICATIONS<br>COPIES OF THIS DRAWING SHEET. |      |
| RECEIVED<br>REGISTERED PROFESSIONAL<br>ENGINEER<br>No. _____<br>Date _____   |      |



ALTERNATIVE 5  
PROPOSED  
SOMIS BYPASS ALTERNATIVE  
 $\frac{1}{100}$   
L-3



|   |                       |                            |            |              |
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| STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION<br><i>Et Gtrans.</i> | FUNCTIONAL SUPERVISOR | CALCULATED+<br>DESIGNED BY | REVISED BY | DATE REVISED |
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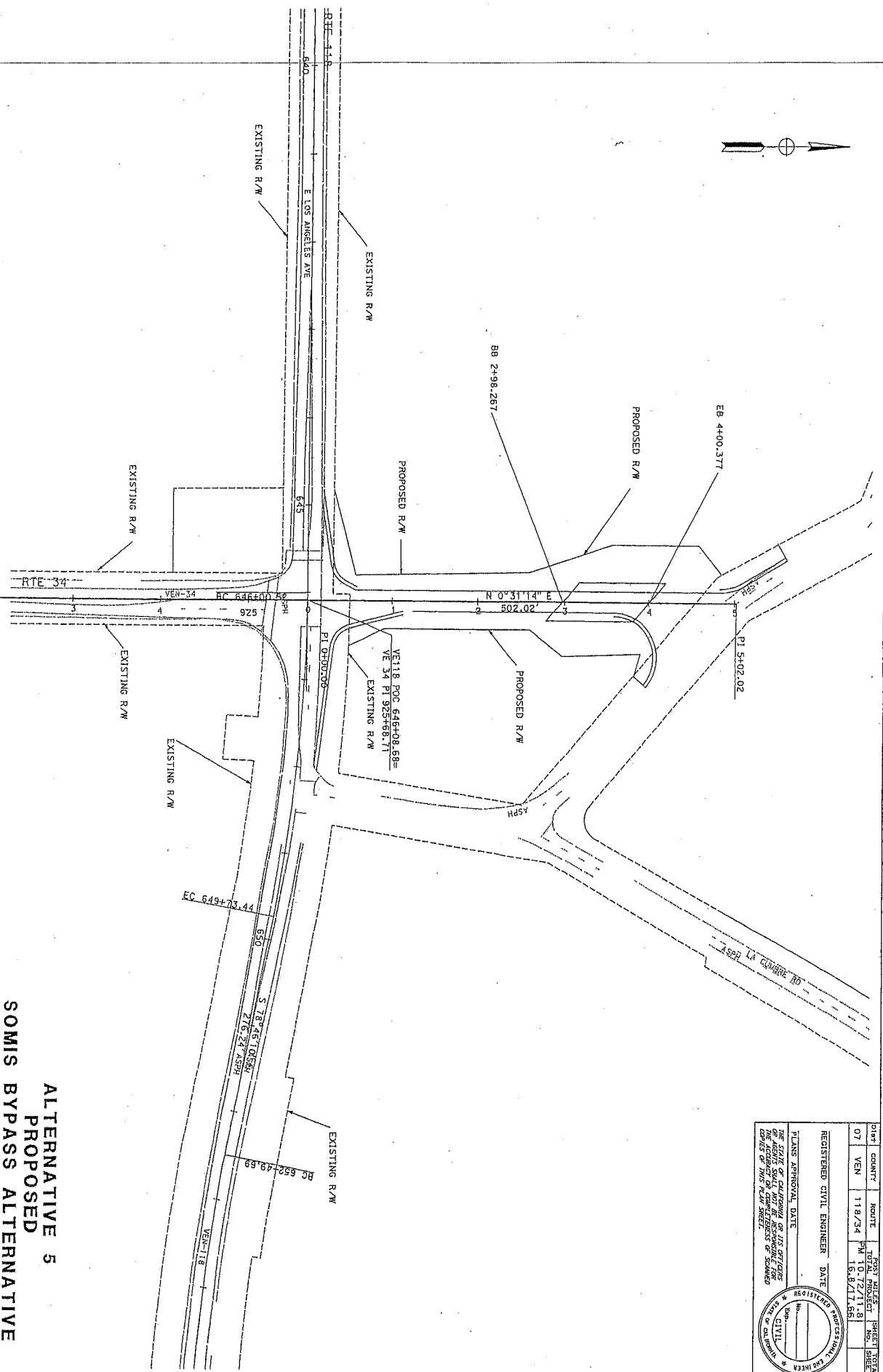


ALTERNATIVE 5  
PROPOSED  
SOMIS BYPASS ALTERNATIVE  
1<sup>st</sup> EDITION  
L-4

|   |        |                  |               |                           |
|---|--------|------------------|---------------|---------------------------|
| DIRT                                    | COUNTY | ROUTE            | TOTAL MILEAGE | SHEET                     |
| 07                                      | VEN    | 11874 PM 1072115 | 16.877.56     | 100 TOTAL SHEETS          |
| PLANS APPROVAL DATE                     |        |                  |               | REGISTERED CIVIL ENGINEER |
| THE STATE OF CALIFORNIA ON ITS OFFICIAL |        |                  |               | DATE                      |
| RECEIVED AND APPROVED FOR CONSTRUCTION  |        |                  |               | REG. NO. _____            |
| THIS PLAN SHEET                         |        |                  |               | REG. DATE _____           |

REGISTERED CIVIL ENGINEER  
DATE  
REG. NO. \_\_\_\_\_  
REG. DATE \_\_\_\_\_

\* REGISTERED PROFESSIONAL CIVIL  
ENGINEER  
FOR THE STATE OF CALIFORNIA  
PRACTICING UNDER THE  
PROFESSIONAL CIVIL  
ENGINEERING LAW  
OF THIS PLAN SHEET.



**ALTERNATIVE 5  
PROPOSED  
SOMIS BYPASS ALTERNATIVE**

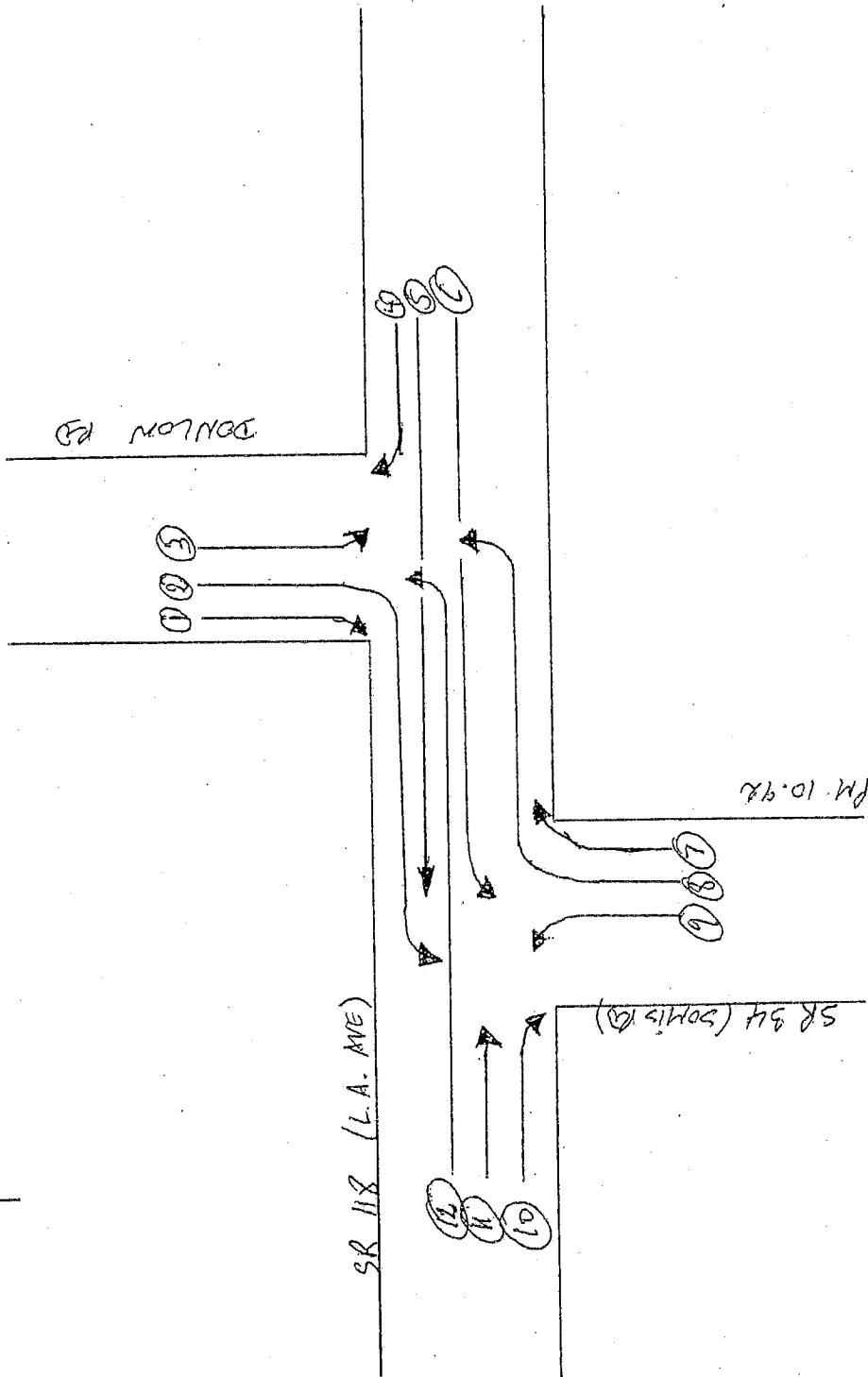
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## **ATTACHMENT 3**

**TRAFFIC COUNT/VOLUME  
TRUCK VOLUME  
PROJECTED TRAFFIC VOLUME**

| <p>L.A. Ave. (Ven 118)</p>  | <p># OF LANES 1</p> <table border="1"> <thead> <tr> <th colspan="4">PEDESTRIANS</th> </tr> <tr> <th>AM</th> <th>NOON</th> <th>PM</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>1</td> <td></td> <td>3</td> </tr> </tbody> </table><br><table border="1"> <thead> <tr> <th colspan="4">8.0 Hour Total</th> </tr> <tr> <th>PM PK.</th> <th>NOON PK.</th> <th>AM PK.</th> <th></th> </tr> </thead> <tbody> <tr> <td>102</td> <td>453</td> <td>103</td> <td>658</td> </tr> <tr> <td>30</td> <td>71</td> <td>29</td> <td>130</td> </tr> <tr> <td>1</td> <td>48</td> <td>14</td> <td>63</td> </tr> <tr> <td>13</td> <td>97</td> <td>8</td> <td>118</td> </tr> </tbody> </table> | PEDESTRIANS    |           |  |       | AM | NOON | PM | TOTAL | 2 | 1 |  | 3                          | 8.0 Hour Total  |             |            |      | PM PK. | NOON PK.     | AM PK.       |           | 102  | 453            | 103            | 658       | 30 | 71             | 29             | 130       | 1   | 48   | 14  | 63  | 13  | 97   | 8   | 118 | <p>City/County:</p> <p><i>Ven 34/Donlon Rd</i></p> <p>DAY OF THE WEEK:</p> <p>Tuesday</p> |
|---|--|----------------|-----------|--|-------|----|------|----|-------|---|---|--|----------------------------|---|-------------|------------|------|--------|--------------|--------------|-----------|------|----------------|----------------|-----------|----|----------------|----------------|-----------|-----|------|-----|-----|-----|------|-----|-----|---|
| PEDESTRIANS   |  |                |           |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| AM  | NOON   | PM             | TOTAL     |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 2   | 1  |                | 3         |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 8.0 Hour Total  |  |                |           |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| PM PK.  | NOON PK.   | AM PK.         |           |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 102   | 453  | 103            | 658       |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 30  | 71   | 29             | 130       |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 1   | 48   | 14             | 63        |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 13  | 97   | 8              | 118       |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| <p># OF LANES 1</p> <table border="1"> <thead> <tr> <th colspan="4">PEDESTRIANS</th> </tr> <tr> <th>TOTAL</th> <th>PM</th> <th>NOON</th> <th>AM</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>1</td> <td>1</td> <td></td> </tr> </tbody> </table> | PEDESTRIANS  |                |           |  | TOTAL | PM | NOON | AM | 2     | 1 | 1 |  | <p>TOTAL TRAFFIC 12652</p> | <p># OF LANES 1</p> <table border="1"> <thead> <tr> <th colspan="4">PEDESTRIANS</th> </tr> <tr> <th>TOTAL</th> <th>PM</th> <th>NOON</th> <th>AM</th> </tr> </thead> <tbody> <tr> <td>41</td> <td>7</td> <td>2</td> <td>5</td> </tr> <tr> <td>2745</td> <td>434</td> <td>296</td> <td>345</td> </tr> <tr> <td>2535</td> <td>338</td> <td>299</td> <td>405</td> </tr> <tr> <td>5321</td> <td>779</td> <td>597</td> <td>755</td> </tr> </tbody> </table>         | PEDESTRIANS |            |      |        | TOTAL        | PM           | NOON      | AM   | 41             | 7              | 2         | 5  | 2745           | 434            | 296       | 345 | 2535 | 338 | 299 | 405 | 5321 | 779 | 597 | 755   |
| PEDESTRIANS   |  |                |           |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| TOTAL   | PM   | NOON           | AM        |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 2   | 1  | 1              |           |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| PEDESTRIANS   |  |                |           |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| TOTAL   | PM   | NOON           | AM        |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 41  | 7  | 2              | 5         |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 2745  | 434  | 296            | 345       |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 2535  | 338  | 299            | 405       |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 5321  | 779  | 597            | 755       |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| <p><b>G+</b></p> <p>Ven 34</p> <p>INTERSECTION SUMMARY SHEET FOR:<br/>L.A. Ave. (Ven 118)<br/>&amp;<br/>Ven 34/Donlon Rd</p>  | <table border="1"> <thead> <tr> <th colspan="4">PEDESTRIANS</th> </tr> <tr> <th>AM</th> <th>NOON</th> <th>PM</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td>1</td> </tr> </tbody> </table> <p># OF LANES 2</p>   | PEDESTRIANS    |           |  |       | AM | NOON | PM | TOTAL | 1 |   |  | 1                          | <p>COUNTY: ROUTE: P/M:</p> <p>Ventura 118 10.92</p> <table border="1"> <thead> <tr> <th>PEAK HOUR</th> <th>TIME TAKEN</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>AM</td> <td>7:15 to 8:15</td> <td>6:00 to 9:00</td> <td>9/30/2008</td> </tr> <tr> <td>NOON</td> <td>11:45 to 12:45</td> <td>11:00 to 13:00</td> <td>9/30/2008</td> </tr> <tr> <td>PM</td> <td>15:30 to 16:30</td> <td>15:00 to 18:00</td> <td>9/30/2008</td> </tr> </tbody> </table> | PEAK HOUR   | TIME TAKEN | DATE | AM     | 7:15 to 8:15 | 6:00 to 9:00 | 9/30/2008 | NOON | 11:45 to 12:45 | 11:00 to 13:00 | 9/30/2008 | PM | 15:30 to 16:30 | 15:00 to 18:00 | 9/30/2008 |     |      |     |     |     |      |     |     |   |
| PEDESTRIANS   |  |                |           |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| AM  | NOON   | PM             | TOTAL     |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| 1   |  |                | 1         |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| PEAK HOUR   | TIME TAKEN   | DATE           |           |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| AM  | 7:15 to 8:15   | 6:00 to 9:00   | 9/30/2008 |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| NOON  | 11:45 to 12:45   | 11:00 to 13:00 | 9/30/2008 |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |
| PM  | 15:30 to 16:30   | 15:00 to 18:00 | 9/30/2008 |  |       |    |      |    |       |   |   |  |                            |   |             |            |      |        |              |              |           |      |                |                |           |    |                |                |           |     |      |     |     |     |      |     |     |   |

Remarks: This location consists of 2 T-intersections, but for this study, we counted traffic as if it was a conventional 4-leg intersection. See attached sketch for traffic movements.



Department Of Transportation • District 7 • Traffic Branch  
Intersection Peak Hour Summary Sheet

|                    |               |                     |                    |                         |                           |
|--------------------|---------------|---------------------|--------------------|-------------------------|---------------------------|
| COUNTY:<br>Ventura | ROUTE:<br>118 | POST MILE:<br>10.92 | DATE:<br>9/30/2008 | DAY OF WEEK:<br>Tuesday | TIME OF DAY:<br>6:00 9:00 |
|--------------------|---------------|---------------------|--------------------|-------------------------|---------------------------|

INTERSECTION: (N/S) & (E/W) #REF!  
Ven 34/Donlon Rd & L.A. Ave. (Ven 118)

**Accumulated Hourly Totals**

**Peak  
Hour**

| TIME                  |          | 6:00 | 6:15 | 6:30 | 6:45 | 7:00 | 7:15 | 7:30 | 7:45 | 8:00 | 8:15 | 8:30 | 8:45 | 9:00  |
|-----------------------|----------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
|                       |          | 7:00 | 7:15 | 7:30 | 7:45 | 8:00 | 8:15 | 8:30 | 8:45 | 9:00 | 9:15 | 9:30 | 9:45 | 10:00 |
| N<br>O<br>R<br>T<br>H | Left     | 70   | 71   | 67   | 67   | 57   | 63   | 64   | 67   | 63   |      |      |      |       |
|                       | Straight | 53   | 56   | 45   | 31   | 23   | 32   | 37   | 46   | 43   |      |      |      |       |
|                       | Right    | 374  | 413  | 407  | 407  | 423  | 452  | 439  | 410  | 353  |      |      |      |       |
| S<br>O<br>U<br>T<br>H | Left     | 13   | 13   | 12   | 9    | 8    | 8    | 11   | 11   | 12   |      |      |      |       |
|                       | Straight | 43   | 45   | 60   | 68   | 86   | 97   | 83   | 63   | 41   |      |      |      |       |
|                       | Right    | 7    | 9    | 8    | 10   | 11   | 13   | 12   | 9    | 9    |      |      |      |       |
| E<br>A<br>S<br>T      | Left     | 27   | 31   | 27   | 31   | 27   | 46   | 54   | 57   | 56   |      |      |      |       |
|                       | Straight | 329  | 336  | 313  | 310  | 303  | 306  | 321  | 311  | 306  |      |      |      |       |
|                       | Right    | 38   | 26   | 20   | 9    | 8    | 8    | 16   | 19   | 21   |      |      |      |       |
| W<br>E<br>S<br>T      | Left     | 283  | 319  | 351  | 396  | 419  | 405  | 361  | 318  | 277  |      |      |      |       |
|                       | Straight | 279  | 327  | 353  | 353  | 366  | 345  | 334  | 321  | 314  |      |      |      |       |
|                       | Right    | 7    | 6    | 8    | 9    | 6    | 5    | 3    | 5    | 5    |      |      |      |       |
| N/S TOTAL             |          | 560  | 607  | 599  | 592  | 608  | 665  | 646  | 606  | 521  |      |      |      |       |
| E/W TOTAL             |          | 963  | 1045 | 1072 | 1108 | 1129 | 1115 | 1089 | 1031 | 979  |      |      |      |       |
| ALL DIRECTIONS        |          | 1523 | 1652 | 1671 | 1700 | 1737 | 1780 | 1735 | 1637 | 1500 |      |      |      |       |

**Traffic Count Summary**

|                  | NORTH |          |       | SOUTH |          |       | EAST |          |       | WEST |          |       | TOTALS |
|------------------|-------|----------|-------|-------|----------|-------|------|----------|-------|------|----------|-------|--------|
|                  | Left  | Straight | Right | Left  | Straight | Right | Left | Straight | Right | Left | Straight | Right |        |
| PEAK HOUR TOTAL  | 547   |          |       | 118   |          |       | 360  |          |       | 755  |          |       | 1780   |
| 3 Hour Total     | 190   | 119      | 1150  | 33    | 170      | 27    | 110  | 938      | 67    | 979  | 959      | 18    | 4760   |
| PEDESTRIAN TOTAL | 1     |          |       | 2     |          |       |      |          |       |      |          |       | 3      |

Department Of Transportation ♦ District 7 ♦ Traffic Branch  
Intersection Peak Hour Summary Sheet

|                    |               |                     |                    |                         |                             |
|--------------------|---------------|---------------------|--------------------|-------------------------|-----------------------------|
| COUNTY:<br>Ventura | ROUTE:<br>118 | POST MILE:<br>10.92 | DATE:<br>9/30/2008 | DAY OF WEEK:<br>Tuesday | TIME OF DAY:<br>11:00 13:00 |
|--------------------|---------------|---------------------|--------------------|-------------------------|-----------------------------|

INTERSECTION: (N/S) & (E/W)  
Ven 34/Donlon Rd & L.A. Ave. (Ven 118) #REF!

**Accumulated Hourly Totals**

|                       |          | Peak Hour |       |       |       |       |       |       |       |       |       |       |       |       |  |
|-----------------------|----------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| TIME                  |          | 11:00     | 11:15 | 11:30 | 11:45 | 12:00 | 12:15 | 12:30 | 12:45 | 13:00 | 13:15 | 13:30 | 13:45 | 14:00 |  |
|                       |          | 12:00     | 12:15 | 12:30 | 12:45 | 13:00 | 13:15 | 13:30 | 13:45 | 14:00 | 14:15 | 14:30 | 14:45 | 15:00 |  |
| N<br>O<br>R<br>T<br>H | Left     | 54        | 48    | 50    | 51    | 54    |       |       |       |       |       |       |       |       |  |
|                       | Straight | 42        | 37    | 40    | 45    | 44    |       |       |       |       |       |       |       |       |  |
|                       | Right    | 228       | 224   | 214   | 220   | 220   |       |       |       |       |       |       |       |       |  |
| S<br>O<br>U<br>T<br>H | Left     | 13        | 12    | 12    | 14    | 14    |       |       |       |       |       |       |       |       |  |
|                       | Straight | 40        | 47    | 51    | 48    | 45    |       |       |       |       |       |       |       |       |  |
|                       | Right    | 5         | 4     | 2     | 1     | 2     |       |       |       |       |       |       |       |       |  |
| E<br>A<br>S<br>T      | Left     | 43        | 49    | 57    | 51    | 43    |       |       |       |       |       |       |       |       |  |
|                       | Straight | 225       | 239   | 240   | 247   | 236   |       |       |       |       |       |       |       |       |  |
|                       | Right    | 13        | 14    | 18    | 28    | 31    |       |       |       |       |       |       |       |       |  |
| W<br>E<br>S<br>T      | Left     | 315       | 305   | 303   | 299   | 285   |       |       |       |       |       |       |       |       |  |
|                       | Straight | 304       | 271   | 286   | 296   | 306   |       |       |       |       |       |       |       |       |  |
|                       | Right    | 4         | 1     | 1     | 2     | 2     |       |       |       |       |       |       |       |       |  |
| N/S TOTAL             |          | 382       | 372   | 369   | 379   | 379   |       |       |       |       |       |       |       |       |  |
| E/W TOTAL             |          | 904       | 879   | 905   | 923   | 903   |       |       |       |       |       |       |       |       |  |
| ALL DIRECTIONS TOTAL  |          | 1286      | 1251  | 1274  | 1302  | 1282  |       |       |       |       |       |       |       |       |  |

**Traffic Count Summary**

|                  | NORTH |          |       | SOUTH |          |       | EAST |          |       | WEST |          |       | TOTALS |
|------------------|-------|----------|-------|-------|----------|-------|------|----------|-------|------|----------|-------|--------|
|                  | Left  | Straight | Right | Left  | Straight | Right | Left | Straight | Right | Left | Straight | Right |        |
| PEAK HOUR TOTAL  | 316   |          |       | 63    |          |       | 326  |          |       | 597  |          |       | 1302   |
| 2 Total Hour     | 108   | 86       | 448   | 27    | 85       | 7     | 86   | 461      | 44    | 600  | 610      | 6     | 2568   |
| PEDESTRIAN TOTAL |       |          |       | 1     |          |       | 1    |          |       |      |          |       | 2      |

Department Of Transportation • District 7 • Traffic Branch  
Intersection Peak Hour Summary Sheet

| COUNTY:                     | ROUTE:   | POST MILE: | DATE:     | DAY OF WEEK:          |          |       | TIME OF DAY: |          |       |       |          |       |        |
|-----------------------------|----------|------------|-----------|-----------------------|----------|-------|--------------|----------|-------|-------|----------|-------|--------|
| Ventura                     | 118      | 10.92      | 9/30/2008 | Tuesday               |          |       | 15:00        | 18:00    |       |       |          |       |        |
| INTERSECTION: (N/S) & (E/W) |          |            |           | #REF!                 |          |       |              |          |       |       |          |       |        |
| Ven 34/Donlon Rd            |          |            |           | & L.A. Ave. (Ven 118) |          |       |              |          |       |       |          |       |        |
| Accumulated Hourly Totals   |          |            |           |                       |          |       |              |          |       |       |          |       |        |
| Peak Hour                   |          |            |           |                       |          |       |              |          |       |       |          |       |        |
| TIME                        | 15:00    | 15:15      | 15:30     | 15:45                 | 16:00    | 16:15 | 16:30        | 16:45    | 17:00 | 17:15 | 17:30    | 17:45 | 18:00  |
|                             | 16:00    | 16:15      | 16:30     | 16:45                 | 17:00    | 17:15 | 17:30        | 17:45    | 18:00 | 18:15 | 18:30    | 18:45 | 19:00  |
| N<br>O<br>R<br>T<br>H       | Left     | 77         | 98        | 98                    | 109      | 102   | 97           | 117      | 112   | 126   |          |       |        |
|                             | Straight | 62         | 65        | 63                    | 56       | 60    | 64           | 63       | 76    | 71    |          |       |        |
|                             | Right    | 425        | 455       | 466                   | 385      | 368   | 390          | 432      | 501   | 485   |          |       |        |
| S<br>O<br>U<br>T<br>H       | Left     | 15         | 21        | 29                    | 27       | 23    | 16           | 9        | 8     | 5     |          |       |        |
|                             | Straight | 70         | 66        | 71                    | 71       | 66    | 71           | 62       | 63    | 62    |          |       |        |
|                             | Right    | 32         | 29        | 30                    | 23       | 24    | 21           | 19       | 17    | 12    |          |       |        |
| E<br>A<br>S<br>T            | Left     | 43         | 30        | 23                    | 21       | 20    | 20           | 17       | 18    | 19    |          |       |        |
|                             | Straight | 276        | 303       | 322                   | 330      | 331   | 343          | 347      | 353   | 361   |          |       |        |
|                             | Right    | 13         | 13        | 12                    | 9        | 15    | 15           | 16       | 16    | 12    |          |       |        |
| W<br>E<br>S<br>T            | Left     | 294        | 325       | 338                   | 357      | 370   | 362          | 357      | 323   | 292   |          |       |        |
|                             | Straight | 411        | 430       | 434                   | 434      | 425   | 415          | 385      | 368   | 340   |          |       |        |
|                             | Right    | 8          | 8         | 7                     | 6        | 5     | 3            | 5        | 6     | 4     |          |       |        |
| N/S TOTAL                   |          | 681        | 734       | 757                   | 671      | 643   | 659          | 702      | 777   | 761   |          |       |        |
| E/W TOTAL                   |          | 1045       | 1109      | 1136                  | 1157     | 1166  | 1158         | 1127     | 1084  | 1028  |          |       |        |
| ALL DIRECTIONS<br>TOTAL     |          | 1726       | 1843      | 1893                  | 1828     | 1809  | 1817         | 1829     | 1861  | 1789  |          |       |        |
| Traffic Count Summary       |          |            |           |                       |          |       |              |          |       |       |          |       |        |
|                             | NORTH    |            |           | SOUTH                 |          |       | EAST         |          |       | WEST  |          |       | TOTALS |
|                             | Left     | Straight   | Right     | Left                  | Straight | Right | Left         | Straight | Right | Left  | Straight | Right |        |
| PEAK HOUR<br>TOTAL          | 627      |            |           | 130                   |          |       | 357          |          |       | 779   |          |       | 1893   |
| 3.0 Hour Total              | 305      | 193        | 1278      | 43                    | 198      | 68    | 82           | 968      | 40    | 956   | 1176     | 17    | 5324   |
| PEDESTRIAN<br>TOTAL         |          |            |           |                       |          |       | 1            |          |       |       |          |       | 1      |

## Northbound Morning

| Department Of Transportation ♦ District 7 ♦ Traffic Branch<br>Manual Traffic Count |        |               |  |              |                |                 |                    |                |     |                |      |
|--|--------|---------------|--|--------------|----------------|-----------------|--------------------|----------------|-----|----------------|------|
| COUNTY:  | ROUTE: | POST MILE:    |  | DAY OF WEEK: |                | TIME OF DAY:    |                    |                |     |                |      |
| Ventura  | 118    | 10.92         |  | Tuesday      |                | 6:00 - 9:00     |                    |                |     |                |      |
| INTERSECTION: (N/S) & (E/W)  |        |               | Ven 34/Donlon Rd & L.A. Ave. (Ven 118) |              |                | DATE: 9/30/2008 |                    |                |     |                |      |
| "LEG" DESCRIPTION:<br>Ven 34 (Somis Rd)  |        |               | DIRECTION: N/B                         |              | WEATHER: Clear |                 | COUNTED BY: Dduong |                |     |                |      |
| Time   | Peds   | Left Turn (1) |  |              | Straight (2)   |                 |                    | Right Turn (3) |     | 1/4 Hour Total |      |
|  |        | Car           | Bus                                    | Truck        | Car            | Bus             | Truck              | Car            | Bus | Truck          |      |
| 6:00 - 6:15  |        | 8             |  |              | 6              |                 |                    | 57             |     |                | 71   |
| 6:15 - 6:30  |        | 18            |  |              | 15             |                 |                    | 97             |     |                | 130  |
| 6:30 - 6:45  |        | 18            |  |              | 16             |                 |                    | 107            |     |                | 141  |
| 6:45 - 7:00  | 1      | 26            |  |              | 16             |                 |                    | 113            |     |                | 155  |
| Hour Total   |        | 1             | 70                                     |              | 53             |                 |                    | 374            |     |                | 497  |
| 7:00 - 7:15  |        | 9             |  |              | 9              |                 |                    | 96             |     |                | 114  |
| 7:15 - 7:30  |        | 14            |  |              | 4              |                 |                    | 91             |     |                | 109  |
| 7:30 - 7:45  |        | 18            |  |              | 2              |                 |                    | 107            |     |                | 127  |
| 7:45 - 8:00  |        | 16            |  |              | 8              |                 |                    | 129            |     |                | 153  |
| Hour Total   |        |               | 57                                     |              | 23             |                 |                    | 423            |     |                | 503  |
| 8:00 - 8:15  |        | 15            |  |              | 18             |                 |                    | 125            |     |                | 158  |
| 8:15 - 8:30  |        | 15            |  |              | 9              |                 |                    | 78             |     |                | 102  |
| 8:30 - 8:45  |        | 21            |  |              | 11             |                 |                    | 78             |     |                | 110  |
| 8:45 - 9:00  |        | 12            |  |              | 5              |                 |                    | 72             |     |                | 89   |
| Hour Total   |        |               | 63                                     |              | 43             |                 |                    | 353            |     |                | 459  |
| 9:00 - 9:15  |        |               |  |              |                |                 |                    |                |     |                |      |
| 9:15 - 9:30  |        |               |  |              |                |                 |                    |                |     |                |      |
| 9:30 - 9:45  |        |               |  |              |                |                 |                    |                |     |                |      |
| 9:45 - 10:00   |        |               |  |              |                |                 |                    |                |     |                |      |
| Hour Total   |        |               |  |              |                |                 |                    |                |     |                |      |
| Total  | 1      | 190           |  |              | 119            |                 |                    | 1150           |     |                |      |
| Grand Total All Vehicles   | 1      | 190           |  |              | 119            |                 |                    | 1150           |     |                | 1459 |

Remarks:

## Northbound Afternoon

Department Of Transportation ♦ District 7 ♦ Traffic Branch  
Manual Traffic Count

| COUNTY:                     | ROUTE:                                 | POST MILE:    | DAY OF WEEK: |                 |              | TIME OF DAY:  |       |                |                |     |
|-----------------------------|--|---------------|--------------|-----------------|--------------|---------------|-------|----------------|----------------|-----|
| Ventura                     | 118                                    | 10.92         | Tuesday      |                 |              | 11:00 - 13:00 |       |                |                |     |
| INTERSECTION: (N/S) & (E/W) | Ven 34/Donlon Rd & L.A. Ave. (Ven 118) |               |              | DATE: 9/30/2008 |              |               |       |                |                |     |
| "LEG" DESCRIPTION:          | Ven 34 (Somis Rd)                      |               |              | DIRECTION:      | WEATHER:     | COUNTED BY:   |       |                |                |     |
|                             | N/B                                    |               |              | Clear           |              | Dduong        |       |                |                |     |
| Time                        | Peds                                   | Left Turn (9) |              |                 | Straight (7) |               |       | Right Turn (7) | 1/4 Hour Total |     |
|                             |  | Car           | Bus          | Truck           | Car          | Bus           | Truck | Car            |                | Bus |
| 11:00 - 11:15               |  | 19            |              |                 | 21           |               | 70    |                |                | 110 |
| 11:15 - 11:30               |  | 13            |              |                 | 5            |               | 55    |                |                | 73  |
| 11:30 - 11:45               |  | 11            |              |                 | 6            |               | 51    |                |                | 68  |
| 11:45 - 12:00               |  | 11            |              |                 | 10           |               | 52    |                |                | 73  |
| Hour Total                  |  | 54            |              |                 | 42           |               | 228   |                |                | 324 |
| 12:00 - 12:15               |  | 13            |              |                 | 16           |               | 66    |                |                | 95  |
| 12:15 - 12:30               |  | 15            |              |                 | 8            |               | 45    |                |                | 68  |
| 12:30 - 12:45               |  | 12            |              |                 | 11           |               | 57    |                |                | 80  |
| 12:45 - 13:00               |  | 14            |              |                 | 9            |               | 52    |                |                | 75  |
| Hour Total                  |  | 54            |              |                 | 44           |               | 220   |                |                | 318 |
| 13:00 - 13:15               |  |               |              |                 |              |               |       |                |                |     |
| 13:15 - 13:30               |  |               |              |                 |              |               |       |                |                |     |
| 13:30 - 13:45               |  |               |              |                 |              |               |       |                |                |     |
| 13:45 - 14:00               |  |               |              |                 |              |               |       |                |                |     |
| Hour Total                  |  |               |              |                 |              |               |       |                |                |     |
| 14:00 - 14:15               |  |               |              |                 |              |               |       |                |                |     |
| 14:15 - 14:30               |  |               |              |                 |              |               |       |                |                |     |
| 14:30 - 14:45               |  |               |              |                 |              |               |       |                |                |     |
| 14:45 - 15:00               |  |               |              |                 |              |               |       |                |                |     |
| Hour Total                  |  |               |              |                 |              |               |       |                |                |     |
| Total                       |  | 108           |              |                 | 86           |               | 448   |                |                |     |
| Grand Total All Vehicles    |  | 108           |              |                 | 86           |               |       | 448            |                | 642 |

Remarks:

## Northbound Evening

Department Of Transportation ♦ District 7 ♦ Traffic Branch  
Manual Traffic Count

| COUNTY:<br>Ventura  | ROUTE:<br>118     | POST MILE:<br>10.92 | DAY OF WEEK:<br>Tuesday | TIME OF DAY:<br>15:00 - 18:00 |                |     |       |      |      |
|---|-------------------|---------------------|-------------------------|-------------------------------|----------------|-----|-------|------|------|
| INTERSECTION: (N/S) & (E/W)<br>Ven 34/Donlon Rd & L.A. Ave. (Ven 118) |                   |                     |                         | DATE:<br>9/30/2008            |                |     |       |      |      |
| "LEG" DESCRIPTION:<br>Ven 34 (Somis Rd)                               | DIRECTION:<br>N/B | WEATHER:<br>Clear   | COUNTED BY:<br>Dduong   |                               |                |     |       |      |      |
| Time  | Peds              | Left Turn (9)       | Straight (8)            | Right Turn (7)                | 1/4 Hour Total |     |       |      |      |
|   |                   | Car                 | Bus                     | Truck                         | Car            | Bus | Truck |      |      |
| 15:00 - 15:15   |                   | 15                  |                         |                               | 13             |     |       | 68   | 96   |
| 15:15 - 15:30   |                   | 18                  |                         |                               | 17             |     |       | 99   | 134  |
| 15:30 - 15:45   |                   | 21                  |                         |                               | 19             |     |       | 127  | 167  |
| 15:45 - 16:00   |                   | 23                  |                         |                               | 13             |     |       | 131  | 167  |
| Hour Total  |                   | 77                  |                         |                               | 62             |     |       | 425  | 564  |
| 16:00 - 16:15   |                   | 36                  |                         |                               | 16             |     |       | 98   | 150  |
| 16:15 - 16:30   |                   | 18                  |                         |                               | 15             |     |       | 110  | 143  |
| 16:30 - 16:45   |                   | 32                  |                         |                               | 12             |     |       | 46   | 90   |
| 16:45 - 17:00   |                   | 16                  |                         |                               | 17             |     |       | 114  | 147  |
| Hour Total  |                   | 102                 |                         |                               | 60             |     |       | 368  | 530  |
| 17:00 - 17:15   |                   | 31                  |                         |                               | 20             |     |       | 120  | 171  |
| 17:15 - 17:30   |                   | 38                  |                         |                               | 14             |     |       | 152  | 204  |
| 17:30 - 17:45   |                   | 27                  |                         |                               | 25             |     |       | 115  | 167  |
| 17:45 - 18:00   |                   | 30                  |                         |                               | 12             |     |       | 98   | 140  |
| Hour Total  |                   | 126                 |                         |                               | 71             |     |       | 485  | 682  |
| 18:00 - 18:15   |                   |                     |                         |                               |                |     |       |      |      |
| 18:15 - 18:30   |                   |                     |                         |                               |                |     |       |      |      |
| 18:30 - 18:45   |                   |                     |                         |                               |                |     |       |      |      |
| 18:45 - 19:00   |                   |                     |                         |                               |                |     |       |      |      |
| Hour Total  |                   |                     |                         |                               |                |     |       |      |      |
| Total   |                   | 305                 |                         |                               | 193            |     |       | 1278 |      |
| Grand Total All Vehicles  |                   | 305                 |                         |                               | 193            |     |       | 1278 | 1776 |

Remarks:

## Southbound Morning

Department Of Transportation ♦ District 7 ♦ Traffic Branch  
Manual Traffic Count

| COUNTY:<br>Ventura  | ROUTE:<br>118     | POST MILE:<br>10.92 | DAY OF WEEK:<br>Tuesday | TIME OF DAY:<br>6:00 - 9:00 |                |
|---|-------------------|---------------------|-------------------------|-----------------------------|----------------|
| INTERSECTION: (N/S) & (E/W)<br>Ven 34/Donlon Rd & L.A. Ave. (Ven 118) |                   |                     |                         | DATE:<br>9/30/2008          |                |
| "LEG" DESCRIPTION:<br>Donlon Rd                                       | DIRECTION:<br>S/B | WEATHER:<br>Clear   | COUNTED BY:<br>Tduong   |                             |                |
| Time  | Peds              | Left Turn (2)       | Straight (1)            | Right Turn (1)              | 1/4 Hour Total |
| 6:00 - 6:15   |                   | 2                   | 6                       |                             | 8              |
| 6:15 - 6:30   |                   | 3                   | 10                      | 3                           | 16             |
| 6:30 - 6:45   | 1                 | 5                   | 17                      | 3                           | 25             |
| 6:45 - 7:00   | 1                 | 3                   | 10                      | 1                           | 14             |
| Hour Total  |                   | 2                   | 13                      | 7                           | 63             |
| 7:00 - 7:15   |                   | 2                   | 8                       | 2                           | 12             |
| 7:15 - 7:30   |                   | 2                   | 25                      | 2                           | 29             |
| 7:30 - 7:45   |                   | 2                   | 25                      | 5                           | 32             |
| 7:45 - 8:00   |                   | 2                   | 28                      | 2                           | 32             |
| Hour Total  |                   | 8                   | 86                      | 11                          | 105            |
| 8:00 - 8:15   |                   | 2                   | 19                      | 4                           | 25             |
| 8:15 - 8:30   |                   | 5                   | 11                      | 1                           | 17             |
| 8:30 - 8:45   |                   | 2                   | 5                       | 2                           | 9              |
| 8:45 - 9:00   |                   | 3                   | 6                       | 2                           | 11             |
| Hour Total  |                   | 12                  | 41                      | 9                           | 62             |
| 9:00 - 9:15   |                   |                     |                         |                             |                |
| 9:15 - 9:30   |                   |                     |                         |                             |                |
| 9:30 - 9:45   |                   |                     |                         |                             |                |
| 9:45 - 10:00  |                   |                     |                         |                             |                |
| Hour Total  |                   |                     |                         |                             |                |
| Total   | 2                 | 33                  | 170                     | 27                          |                |
| Grand Total All Vehicles  | 2                 | 33                  | 170                     | 27                          | 230            |

Remarks:

## Southbound Afternoon

Department Of Transportation ♦ District 7 ♦ Traffic Branch  
Manual Traffic Count

| COUNTY:   | ROUTE: | POST MILE:        | DAY OF WEEK:      | TIME OF DAY:          |              |     |       |                |     |       |                |
|---|--------|-------------------|-------------------|-----------------------|--------------|-----|-------|----------------|-----|-------|----------------|
| Ventura   | 118    | 10.92             | Tuesday           | 11:00 - 13:00         |              |     |       |                |     |       |                |
| INTERSECTION: (N/S) & (E/W)<br>Ven 34/Donlon Rd & L.A. Ave. (Ven 118) |        |                   |                   | DATE: 9/30/2008       |              |     |       |                |     |       |                |
| "LEG" DESCRIPTION:<br>Donlon Rd                                       |        | DIRECTION:<br>S/B | WEATHER:<br>Clear | COUNTED BY:<br>Tduong |              |     |       |                |     |       |                |
| Time  | Peds   | Left Turn (3)     |                   |                       | Straight (1) |     |       | Right Turn (1) |     |       | 1/4 Hour Total |
|   |        | Car               | Bus               | Truck                 | Car          | Bus | Truck | Car            | Bus | Truck |                |
| 11:00 - 11:15   |        | 4                 |                   |                       | 6            |     |       | 1              |     |       | 11             |
| 11:15 - 11:30   |        | 3                 |                   |                       | 11           |     |       | 3              |     |       | 17             |
| 11:30 - 11:45   |        | 2                 |                   |                       | 10           |     |       | 1              |     |       | 13             |
| 11:45 - 12:00   |        | 4                 |                   |                       | 13           |     |       |                |     |       | 17             |
| Hour Total  |        | 13                |                   |                       | 40           |     |       | 5              |     |       | 58             |
| 12:00 - 12:15   |        | 3                 |                   |                       | 13           |     |       |                |     |       | 16             |
| 12:15 - 12:30   | 1      | 3                 |                   |                       | 15           |     |       | 1              |     |       | 19             |
| 12:30 - 12:45   |        | 4                 |                   |                       | 7            |     |       |                |     |       | 11             |
| 12:45 - 13:00   |        | 4                 |                   |                       | 10           |     |       | 1              |     |       | 15             |
| Hour Total  |        | 1                 | 14                |                       | 45           |     |       | 2              |     |       | 61             |
| 13:00 - 13:15   |        |                   |                   |                       |              |     |       |                |     |       |                |
| 13:15 - 13:30   |        |                   |                   |                       |              |     |       |                |     |       |                |
| 13:30 - 13:45   |        |                   |                   |                       |              |     |       |                |     |       |                |
| 13:45 - 14:00   |        |                   |                   |                       |              |     |       |                |     |       |                |
| Hour Total  |        |                   |                   |                       |              |     |       |                |     |       |                |
| 14:00 - 14:15   |        |                   |                   |                       |              |     |       |                |     |       |                |
| 14:15 - 14:30   |        |                   |                   |                       |              |     |       |                |     |       |                |
| 14:30 - 14:45   |        |                   |                   |                       |              |     |       |                |     |       |                |
| 14:45 - 15:00   |        |                   |                   |                       |              |     |       |                |     |       |                |
| Hour Total  |        |                   |                   |                       |              |     |       |                |     |       |                |
| Total   | 1      | 27                |                   |                       | 85           |     |       | 7              |     |       |                |
| Grand Total All Vehicles  | 1      | 27                |                   |                       | 85           |     |       | 7              |     |       | 119            |

Remarks:

## Southbound Evening

Department Of Transportation ♦ District 7 ♦ Traffic Branch  
Manual Traffic Count

| COUNTY:                                | ROUTE:     | POST MILE:    | DAY OF WEEK: | TIME OF DAY:  |              |     |       |                |     |       |                |
|--|------------|---------------|--------------|---------------|--------------|-----|-------|----------------|-----|-------|----------------|
| Ventura                                | 118        | 10.92         | Tuesday      | 15:00 - 18:00 |              |     |       |                |     |       |                |
| INTERSECTION: (N/S) & (E/W)            |            |               |              | DATE:         |              |     |       |                |     |       |                |
| Ven 34/Donlon Rd & L.A. Ave. (Ven 118) |            |               |              | 9/30/2008     |              |     |       |                |     |       |                |
| "LEG" DESCRIPTION:                     | DIRECTION: | WEATHER:      | COUNTED BY:  |               |              |     |       |                |     |       |                |
| Donlon Rd                              | S/B        | Clear         | Tduong       |               |              |     |       |                |     |       |                |
| Time                                   | Peds       | Left Turn (3) |              |               | Straight (2) |     |       | Right Turn (1) |     |       | 1/4 Hour Total |
|  |            | Car           | Bus          | Truck         | Car          | Bus | Truck | Car            | Bus | Truck |                |
| 15:00 - 15:15                          |            | 2             |              |               | 18           |     |       | 11             |     |       | 31             |
| 15:15 - 15:30                          |            | 2             |              |               | 14           |     |       | 3              |     |       | 19             |
| 15:30 - 15:45                          |            | 3             |              |               | 17           |     |       | 12             |     |       | 32             |
| 15:45 - 16:00                          |            | 8             |              |               | 21           |     |       | 6              |     |       | 35             |
| Hour Total                             |            | 15            |              |               | 70           |     |       | 32             |     |       | 117            |
| 16:00 - 16:15                          |            | 8             |              |               | 14           |     |       | 8              |     |       | 30             |
| 16:15 - 16:30                          |            | 10            |              |               | 19           |     |       | 4              |     |       | 33             |
| 16:30 - 16:45                          |            | 1             |              |               | 17           |     |       | 5              |     |       | 23             |
| 16:45 - 17:00                          |            | 4             |              |               | 16           |     |       | 7              |     |       | 27             |
| Hour Total                             |            | 23            |              |               | 66           |     |       | 24             |     |       | 113            |
| 17:00 - 17:15                          |            | 1             |              |               | 19           |     |       | 5              |     |       | 25             |
| 17:15 - 17:30                          |            | 3             |              |               | 10           |     |       | 2              |     |       | 15             |
| 17:30 - 17:45                          |            |               |              |               | 18           |     |       | 3              |     |       | 21             |
| 17:45 - 18:00                          |            | 1             |              |               | 15           |     |       | 2              |     |       | 18             |
| Hour Total                             |            | 5             |              |               | 62           |     |       | 12             |     |       | 79             |
| 18:00 - 18:15                          |            |               |              |               |              |     |       |                |     |       |                |
| 18:15 - 18:30                          |            |               |              |               |              |     |       |                |     |       |                |
| 18:30 - 18:45                          |            |               |              |               |              |     |       |                |     |       |                |
| 18:45 - 19:00                          |            |               |              |               |              |     |       |                |     |       |                |
| Hour Total                             |            |               |              |               |              |     |       |                |     |       |                |
| Total                                  |            | 43            |              |               | 198          |     |       | 68             |     |       |                |
| Grand Total All Vehicles               |            | 43            |              |               | 198          |     |       | 68             |     |       | 309            |

Remarks:

Eastbound Morning

Department Of Transportation ♦ District 7 ♦ Traffic Branch  
Manual Traffic Count

| COUNTY:   | ROUTE: | POST MILE:        | DAY OF WEEK:      | TIME OF DAY:          |                |
|---|--------|-------------------|-------------------|-----------------------|----------------|
| Ventura   | 118    | 10.92             | Tuesday           | 6:00 - 9:00           |                |
| INTERSECTION: (N/S) & (E/W)<br>Ven 34/Donlon Rd & L.A. Ave. (Ven 118) |        |                   |                   | DATE:<br>9/30/2008    |                |
| "LEG" DESCRIPTION:<br>Ven 118 (L.A. Ave)                              |        | DIRECTION:<br>E/B | WEATHER:<br>Clear | COUNTED BY:<br>Dluong |                |
| Time  | Peds   | Left Turn (12)    | Straight (11)     | Right Turn (10)       | 1/4 Hour Total |
| 6:00 - 6:15   |        | 3                 | 71                | 14                    | 88             |
| 6:15 - 6:30   |        | 8                 | 85                | 8                     | 101            |
| 6:30 - 6:45   |        | 3                 | 86                | 12                    | 101            |
| 6:45 - 7:00   |        | 13                | 87                | 4                     | 104            |
| Hour Total  |        | 27                | 329               | 38                    | 394            |
| 7:00 - 7:15   |        | 7                 | 78                | 2                     | 87             |
| 7:15 - 7:30   |        | 4                 | 62                | 2                     | 68             |
| 7:30 - 7:45   |        | 7                 | 83                | 1                     | 91             |
| 7:45 - 8:00   |        | 9                 | 80                | 3                     | 92             |
| Hour Total  |        | 27                | 303               | 8                     | 338            |
| 8:00 - 8:15   |        | 26                | 81                | 2                     | 109            |
| 8:15 - 8:30   |        | 12                | 77                | 10                    | 99             |
| 8:30 - 8:45   |        | 10                | 73                | 4                     | 87             |
| 8:45 - 9:00   |        | 8                 | 75                | 5                     | 88             |
| Hour Total  |        | 56                | 306               | 21                    | 383            |
| 9:00 - 9:15   |        |                   |                   |                       |                |
| 9:15 - 9:30   |        |                   |                   |                       |                |
| 9:30 - 9:45   |        |                   |                   |                       |                |
| 9:45 - 10:00  |        |                   |                   |                       |                |
| Hour Total  |        |                   |                   |                       |                |
| Total   |        | 110               | 938               | 67                    |                |
| Grand Total All Vehicles  |        | 110               | 938               | 67                    | 1115           |

Remarks:

## Eastbound Afternoon

Department Of Transportation ♦ District 7 ♦ Traffic Branch  
Manual Traffic Count

| COUNTY:   | ROUTE: | POST MILE:        | DAY OF WEEK:      | TIME OF DAY:          |                |     |       |     |  |     |
|---|--------|-------------------|-------------------|-----------------------|----------------|-----|-------|-----|--|-----|
| Ventura   | 118    | 10.92             | Tuesday           | 11:00 - 13:00         |                |     |       |     |  |     |
| INTERSECTION: (N/S) & (E/W)<br>Ven 34/Donlon Rd & L.A. Ave. (Ven 118) |        |                   |                   | DATE:<br>9/30/2008    |                |     |       |     |  |     |
| "LEG" DESCRIPTION:<br>Ven 118 (L.A. Ave)                              |        | DIRECTION:<br>E/B | WEATHER:<br>Clear | COUNTED BY:<br>Dluong |                |     |       |     |  |     |
| Time  | Peds   | Left Turn (12)    | Straight (11)     | Right Turn (10)       | 1/4 Hour Total |     |       |     |  |     |
|   |        | Car               | Bus               | Truck                 | Car            | Bus | Truck |     |  |     |
| 11:00 - 11:15   |        | 12                |                   |                       | 41             |     |       | 2   |  | 55  |
| 11:15 - 11:30   |        | 5                 |                   |                       | 62             |     |       | 2   |  | 69  |
| 11:30 - 11:45   |        | 11                |                   |                       | 49             |     |       | 4   |  | 64  |
| 11:45 - 12:00   |        | 15                |                   |                       | 73             |     |       | 5   |  | 93  |
| Hour Total  |        | 43                |                   |                       | 225            |     |       | 13  |  | 281 |
| 12:00 - 12:15   | 1      | 18                |                   |                       | 55             |     |       | 3   |  | 76  |
| 12:15 - 12:30   |        | 13                |                   |                       | 63             |     |       | 6   |  | 82  |
| 12:30 - 12:45   |        | 5                 |                   |                       | 56             |     |       | 14  |  | 75  |
| 12:45 - 13:00   |        | 7                 |                   |                       | 62             |     |       | 8   |  | 77  |
| Hour Total  |        | 1                 | 43                |                       | 236            |     |       | 31  |  | 310 |
| 13:00 - 13:15   |        |                   |                   |                       |                |     |       |     |  |     |
| 13:15 - 13:30   |        |                   |                   |                       |                |     |       |     |  |     |
| 13:30 - 13:45   |        |                   |                   |                       |                |     |       |     |  |     |
| 13:45 - 14:00   |        |                   |                   |                       |                |     |       |     |  |     |
| Hour Total  |        |                   |                   |                       |                |     |       |     |  |     |
| 14:00 - 14:15   |        |                   |                   |                       |                |     |       |     |  |     |
| 14:15 - 14:30   |        |                   |                   |                       |                |     |       |     |  |     |
| 14:30 - 14:45   |        |                   |                   |                       |                |     |       |     |  |     |
| 14:45 - 15:00   |        |                   |                   |                       |                |     |       |     |  |     |
| Hour Total  |        |                   |                   |                       |                |     |       |     |  |     |
| Total   | 1      | 86                |                   |                       | 461            |     |       | 44  |  |     |
| Grand Total All Vehicles  | 1      | 86                |                   | 461                   |                | 44  |       | 591 |  |     |

Remarks:

Eastbound Evening

| Department Of Transportation ♦ District 7 ♦ Traffic Branch |        |                |                     |       |              |               |             |                 |       |   |
|--|--------|----------------|---------------------|-------|--------------|---------------|-------------|-----------------|-------|---|
| Manual Traffic Count                                       |        |                |                     |       |              |               |             |                 |       |   |
| COUNTY:  | ROUTE: | POST MILE:     | DAY OF WEEK:        |       |              | TIME OF DAY:  |             |                 |       |   |
| Ventura  | 118    | 10.92          | Tuesday             |       |              | 15:00 - 18:00 |             |                 |       |   |
| INTERSECTION: (N/S) & (E/W)                                |        |                |                     |       |              |               |             |                 |       |   |
| Ven 34/Donlon Rd   |        | &              | L.A. Ave. (Ven 118) |       |              |               |             |                 | DATE: |   |
| "LEG" DESCRIPTION:   |        |                | DIRECTION:          |       | WEATHER:     |               | COUNTED BY: |                 |       |   |
| Ven 118 (L.A. Ave)   |        |                | E/B                 |       | Clear        |               | Dluong      |                 |       |   |
| Time   | Peds   | Left Turn (12) |                     |       | Straight (6) |               |             | Right Turn (15) |       | 1/4 Hour  |
|  |        | Car            | Bus                 | Truck | Car          | Bus           | Truck       | Car             | Bus   |   |
| 15:00 - 15:15  | 1      | 17             |                     |       | 56           |               |             | 2               |       | 75  |
| 15:15 - 15:30  |        | 18             |                     |       | 63           |               |             | 3               |       | 84  |
| 15:30 - 15:45  |        | 5              |                     |       | 79           |               |             | 6               |       | 90  |
| 15:45 - 16:00  |        | 3              |                     |       | 78           |               |             | 2               |       | 83  |
| Hour Total   |        | 1              | 43                  |       | 276          |               |             | 13              |       | 332   |
| 16:00 - 16:15  |        | 4              |                     |       | 83           |               |             | 2               |       | 89  |
| 16:15 - 16:30  |        | 11             |                     |       | 82           |               |             | 2               |       | 95  |
| 16:30 - 16:45  |        | 3              |                     |       | 87           |               |             | 3               |       | 93  |
| 16:45 - 17:00  |        | 2              |                     |       | 79           |               |             | 8               |       | 89  |
| Hour Total   |        |                | 20                  |       | 331          |               |             | 15              |       | 366   |
| 17:00 - 17:15  |        | 4              |                     |       | 95           |               |             | 2               |       | 101   |
| 17:15 - 17:30  |        | 8              |                     |       | 86           |               |             | 3               |       | 97  |
| 17:30 - 17:45  |        | 4              |                     |       | 93           |               |             | 3               |       | 100   |
| 17:45 - 18:00  |        | 3              |                     |       | 87           |               |             | 4               |       | 94  |
| Hour Total   |        |                | 19                  |       | 361          |               |             | 12              |       | 392   |
| 18:00 - 18:15  |        |                |                     |       |              |               |             |                 |       |   |
| 18:15 - 18:30  |        |                |                     |       |              |               |             |                 |       |   |
| 18:30 - 18:45  |        |                |                     |       |              |               |             |                 |       |   |
| 18:45 - 19:00  |        |                |                     |       |              |               |             |                 |       |   |
| Hour Total   |        |                |                     |       |              |               |             |                 |       |   |
| Total  | 1      | 82             |                     |       | 968          |               |             | 40              |       |  |
| Grand Total All Vehicles                                   | 1      | 82             |                     |       | 968          |               |             | 40              |       | 1090  |

Remarks:

Westbound Morning

| Department Of Transportation ♦ District 7 ♦ Traffic Branch |      |               |            |                |              |                |              |                      |     |       |   |
|--|------|---------------|------------|----------------|--------------|----------------|--------------|----------------------|-----|-------|---|
| Manual Traffic Count                                       |      |               |            |                |              |                |              |                      |     |       |   |
| COUNTY:  |      | ROUTE:        | POST MILE: |                | DAY OF WEEK: |                | TIME OF DAY: |                      |     |       |   |
| Ventura  |      | 118           | 10.92      |                | Tuesday      |                | 6:00 - 9:00  |                      |     |       |   |
| INTERSECTION: (N/S) & (E/W)                                |      |               |            |                |              |                |              |                      |     |       |   |
| Ven 34/Donlon Rd & L.A. Ave. (Ven 118)                     |      |               |            |                |              |                |              | DATE: 9/30/2008      |     |       |   |
| "LEG" DESCRIPTION: Ven 118 (L.A. Ave)                      |      |               |            | DIRECTION: W/B |              | WEATHER: Clear |              | COUNTED BY: Mbeltran |     |       |   |
| Time   | Peds | Left Turn (6) |            |                | Straight (5) |                |              | Right Turn (4)       |     |       | 1/4 Hour Total  |
|  |      | Car           | Bus        | Truck          | Car          | Bus            | Truck        | Car                  | Bus | Truck |   |
| 6:00 - 6:15  |      | 53            |            |                | 52           |                |              | 3                    |     |       | 108   |
| 6:15 - 6:30  |      | 76            |            |                | 69           |                |              |                      |     |       | 145   |
| 6:30 - 6:45  |      | 68            |            |                | 89           |                |              |                      |     |       | 157   |
| 6:45 - 7:00  |      | 86            |            |                | 69           |                |              | 4                    |     |       | 159   |
| Hour Total   |      | 283           |            |                | 279          |                |              | 7                    |     |       | 569   |
| 7:00 - 7:15  |      | 89            |            |                | 100          |                |              | 2                    |     |       | 191   |
| 7:15 - 7:30  |      | 108           |            |                | 95           |                |              | 2                    |     |       | 205   |
| 7:30 - 7:45  |      | 113           |            |                | 89           |                |              | 1                    |     |       | 203   |
| 7:45 - 8:00  |      | 109           |            |                | 82           |                |              | 1                    |     |       | 192   |
| Hour Total   |      | 419           |            |                | 366          |                |              | 6                    |     |       | 791   |
| 8:00 - 8:15  |      | 75            |            |                | 79           |                |              | 1                    |     |       | 155   |
| 8:15 - 8:30  |      | 64            |            |                | 84           |                |              |                      |     |       | 148   |
| 8:30 - 8:45  |      | 70            |            |                | 76           |                |              | 3                    |     |       | 149   |
| 8:45 - 9:00  |      | 68            |            |                | 75           |                |              | 1                    |     |       | 144   |
| Hour Total   |      | 277           |            |                | 314          |                |              | 5                    |     |       | 596   |
| 9:00 - 9:15  |      |               |            |                |              |                |              |                      |     |       |   |
| 9:15 - 9:30  |      |               |            |                |              |                |              |                      |     |       |   |
| 9:30 - 9:45  |      |               |            |                |              |                |              |                      |     |       |   |
| 9:45 - 10:00   |      |               |            |                |              |                |              |                      |     |       |   |
| Hour Total   |      |               |            |                |              |                |              |                      |     |       |   |
| Total  |      | 979           |            |                | 959          |                |              | 18                   |     |       |  |
| Grand Total All Vehicles                                   |      |               | 979        |                | 959          |                |              | 18                   |     |       | 1956  |

Remarks:

Westbound Afternoon

| Department Of Transportation ♦ District 7 ♦ Traffic Branch<br>Manual Traffic Count |      |               |                   |       |                   |     |               |                         |     |       |   |
|--|------|---------------|-------------------|-------|-------------------|-----|---------------|-------------------------|-----|-------|---|
| COUNTY:  |      | ROUTE:        | POST MILE:        |       | DAY OF WEEK:      |     | TIME OF DAY:  |                         |     |       |   |
| Ventura  |      | 118           | 10.92             |       | Tuesday           |     | 11:00 - 13:00 |                         |     |       |   |
| INTERSECTION: (N/S) & (E/W)<br>Ven 34/Donlon Rd & L.A. Ave. (Ven 118)              |      |               |                   |       |                   |     |               |                         |     |       |   |
| "LEG" DESCRIPTION:<br>Ven 118 (L.A. Ave)   |      |               | DIRECTION:<br>W/B |       | WEATHER:<br>Clear |     |               | COUNTED BY:<br>Mbeltran |     |       |   |
| Time   | Peds | Left Turn (6) |                   |       | Straight (5)      |     |               | Right Turn (4)          |     |       | 1/4 Hour Total  |
|  |      | Car           | Bus               | Truck | Car               | Bus | Truck         | Car                     | Bus | Truck |   |
| 11:00 - 11:15  |      | 75            |                   |       | 88                |     |               | 4                       |     |       | 167   |
| 11:15 - 11:30  |      | 76            |                   |       | 58                |     |               |                         |     |       | 134   |
| 11:30 - 11:45  |      | 80            |                   |       | 82                |     |               |                         |     |       | 162   |
| 11:45 - 12:00  |      | 84            |                   |       | 76                |     |               |                         |     |       | 160   |
| Hour Total   |      | 315           |                   |       | 304               |     |               | 4                       |     |       | 623   |
| 12:00 - 12:15  |      | 65            |                   |       | 55                |     |               | 1                       |     |       | 121   |
| 12:15 - 12:30  |      | 74            |                   |       | 73                |     |               |                         |     |       | 147   |
| 12:30 - 12:45  |      | 76            |                   |       | 92                |     |               | 1                       |     |       | 169   |
| 12:45 - 13:00  |      | 70            |                   |       | 86                |     |               |                         |     |       | 156   |
| Hour Total   |      | 285           |                   |       | 306               |     |               | 2                       |     |       | 593   |
| 13:00 - 13:15  |      |               |                   |       |                   |     |               |                         |     |       |   |
| 13:15 - 13:30  |      |               |                   |       |                   |     |               |                         |     |       |   |
| 13:30 - 13:45  |      |               |                   |       |                   |     |               |                         |     |       |   |
| 13:45 - 14:00  |      |               |                   |       |                   |     |               |                         |     |       |   |
| Hour Total   |      |               |                   |       |                   |     |               |                         |     |       |   |
| 14:00 - 14:15  |      |               |                   |       |                   |     |               |                         |     |       |   |
| 14:15 - 14:30  |      |               |                   |       |                   |     |               |                         |     |       |   |
| 14:30 - 14:45  |      |               |                   |       |                   |     |               |                         |     |       |   |
| 14:45 - 15:00  |      |               |                   |       |                   |     |               |                         |     |       |   |
| Hour Total   |      |               |                   |       |                   |     |               |                         |     |       |   |
| Total  |      | 600           |                   |       | 610               |     |               | 6                       |     |       |  |
| Grand Total All Vehicles   |      | 600           |                   |       | 610               |     |               | 6                       |     |       | 1216  |

Remarks:

Westbound Evening

Department Of Transportation ♦ District 7 ♦ Traffic Branch  
Manual Traffic Count

| COUNTY:   | ROUTE: | POST MILE:    | DAY OF WEEK:      |       |                   | TIME OF DAY:       |                         |                |     |       |   |
|---|--------|---------------|-------------------|-------|-------------------|--------------------|-------------------------|----------------|-----|-------|---|
| Ventura   | 118    | 10.92         | Tuesday           |       |                   | 15:00 - 18:00      |                         |                |     |       |   |
| INTERSECTION: (N/S) & (E/W)<br>Ven 34/Donlon Rd & L.A. Ave. (Ven 118) |        |               |                   |       |                   | DATE:<br>9/30/2008 |                         |                |     |       |   |
| "LEG" DESCRIPTION:<br>Ven 118 (L.A. Ave)                              |        |               | DIRECTION:<br>W/B |       | WEATHER:<br>Clear |                    | COUNDED BY:<br>Mbeltran |                |     |       |   |
| Time  | Peds   | Left Turn (6) |                   |       | Straight (5)      |                    |                         | Right Turn (4) |     |       | 1/4 Hour Total  |
|   |        | Car           | Bus               | Truck | Car               | Bus                | Truck                   | Car            | Bus | Truck |   |
| 15:00 - 15:15   |        | 75            |                   |       | 100               |                    |                         | 3              |     |       | 178   |
| 15:15 - 15:30   |        | 73            |                   |       | 97                |                    |                         | 1              |     |       | 171   |
| 15:30 - 15:45   |        | 63            |                   |       | 102               |                    |                         | 1              |     |       | 166   |
| 15:45 - 16:00   |        | 83            |                   |       | 112               |                    |                         | 3              |     |       | 198   |
| Hour Total  |        | 294           |                   |       | 411               |                    |                         | 8              |     |       | 713   |
| 16:00 - 16:15   |        | 106           |                   |       | 119               |                    |                         | 3              |     |       | 228   |
| 16:15 - 16:30   |        | 86            |                   |       | 101               |                    |                         |                |     |       | 187   |
| 16:30 - 16:45   |        | 82            |                   |       | 102               |                    |                         |                |     |       | 184   |
| 16:45 - 17:00   |        | 96            |                   |       | 103               |                    |                         | 2              |     |       | 201   |
| Hour Total  |        | 370           |                   |       | 425               |                    |                         | 5              |     |       | 800   |
| 17:00 - 17:15   |        | 98            |                   |       | 109               |                    |                         | 1              |     |       | 208   |
| 17:15 - 17:30   |        | 81            |                   |       | 71                |                    |                         | 2              |     |       | 154   |
| 17:30 - 17:45   |        | 48            |                   |       | 85                |                    |                         | 1              |     |       | 134   |
| 17:45 - 18:00   |        | 65            |                   |       | 75                |                    |                         |                |     |       | 140   |
| Hour Total  |        | 292           |                   |       | 340               |                    |                         | 4              |     |       | 636   |
| 18:00 - 18:15   |        |               |                   |       |                   |                    |                         |                |     |       |   |
| 18:15 - 18:30   |        |               |                   |       |                   |                    |                         |                |     |       |   |
| 18:30 - 18:45   |        |               |                   |       |                   |                    |                         |                |     |       |   |
| 18:45 - 19:00   |        |               |                   |       |                   |                    |                         |                |     |       |   |
| Hour Total  |        |               |                   |       |                   |                    |                         |                |     |       |   |
| Total   |        | 956           |                   |       | 1176              |                    |                         | 17             |     |       |  |
| Grand Total All Vehicles  |        | 956           |                   |       | 1176              |                    |                         | 17             |     |       | 2149  |

Remarks:

**105960 VEN 118/34 FUTURE PROJECTIONS (2015)**  
**Volume (vph)**

**AM Peak – Existing Alignment**

| EB SR 118 |    | WB SR 118 |     | NB SR 34 |     | SB Donlon Rd. |    |
|-----------|----|-----------|-----|----------|-----|---------------|----|
| TH        | RT | LT        | TH  | LT       | RT  | LT            | RT |
| 370       | 10 | 530       | 360 | 70       | 510 | 10            | 10 |

**AM Peak – Intersection Improvement Alt. & Bridge Alt.**

| EB SR 118 |     | WB SR 118 |     | NB SR 34 |    | SB Donlon Rd. |    |     |
|-----------|-----|-----------|-----|----------|----|---------------|----|-----|
| LT        | TH  | RT        | LT  | TH       | RT | LT            | TH | RT  |
| 50        | 320 | 10        | 420 | 360      | 10 | 70            | 30 | 470 |

**AM Peak – Save Our Somis (SOS) Alt.**

| EB SR 118 |     | WB SR 118 |     | NB SR 34 |    | SB Donlon Rd. |    |     |
|-----------|-----|-----------|-----|----------|----|---------------|----|-----|
| LT        | TH  | RT        | LT  | TH       | RT | LT            | TH | RT  |
| 50        | 320 | 10        | 420 | 360      | 10 | 70            | 30 | 470 |

**AM Peak – Roundabout**

|            | EB SR 118 | WB SR 118 | NB SR 34 | SB Donlon Rd. |
|------------|-----------|-----------|----------|---------------|
| LT Traffic | 50        | 420       | 70       | 10            |
| TH Traffic | 320       | 360       | 30       | 100           |
| RT Traffic | 10        | 10        | 470      | 10            |

**105960 VEN 118/34 FUTURE PROJECTIONS (2015)**  
**Volume (vph)**

**PM Peak – Existing Alignment**

| EB SR 118 |    | WB SR 118 |     | NB SR 34 |     | SB Donlon Rd. |    |
|-----------|----|-----------|-----|----------|-----|---------------|----|
| TH        | RT | LT        | TH  | LT       | RT  | LT            | RT |
| 360       | 10 | 430       | 450 | 100      | 550 | 30            | 30 |

**PM Peak – Intersection Improvement Alt. & Bridge Alt.**

| EB SR 118 |     | WB SR 118 |     | NB SR 34 |    | SB Donlon Rd. |    |     |
|-----------|-----|-----------|-----|----------|----|---------------|----|-----|
| LT        | TH  | RT        | LT  | TH       | RT | LT            | TH | RT  |
| 20        | 340 | 10        | 350 | 450      | 10 | 100           | 70 | 490 |

**PM Peak – Save Our Somis (SOS) Alt.**

| EB SR 118 |     | WB SR 118 |     | NB SR 34 |    | SB Donlon Rd. |    |     |
|-----------|-----|-----------|-----|----------|----|---------------|----|-----|
| LT        | TH  | RT        | LT  | TH       | RT | LT            | TH | RT  |
| 20        | 340 | 10        | 350 | 450      | 10 | 100           | 70 | 490 |

**PM Peak – Roundabout**

|            | EB SR 118 | WB SR 118 | NB SR 34 | SB Donlon Rd. |
|------------|-----------|-----------|----------|---------------|
| LT Traffic | 20        | 390       | 100      | 30            |
| TH Traffic | 340       | 450       | 70       | 70            |
| RT Traffic | 10        | 10        | 490      | 30            |

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105960 VEN 118/34 FUTURE PROJECTIONS (2015)  
Volume (vph)

AM Peak - Somis Bypass North Intersection

| EB 118 |     | WB 118 |     | Bypass |
|--------|-----|--------|-----|--------|
| TH     | LT  | TH     | RT  |        |
| 330    | 420 | 370    | 470 |        |

PM Peak - Somis Bypass North Intersection

| EB 118 |     | WB 118 |     | Bypass |
|--------|-----|--------|-----|--------|
| TH     | LT  | TH     | RT  |        |
| 370    | 350 | 460    | 490 |        |

AM Peak - Somis Bypass Southern Intersection

| Bypass |     | NB 34 | SB 34 |
|--------|-----|-------|-------|
| LT     | TH  | RT    | TH    |
| 420    | 100 | 470   | 110   |

PM Peak - Somis Bypass Southern Intersection

| Bypass |     | NB 34 | SB 34 |
|--------|-----|-------|-------|
| LT     | TH  | RT    | TH    |
| 350    | 170 | 490   | 90    |

**FUTURE PROJECTIONS (2035)**  
**Volume (vph)**

**AM Peak – Existing Alignment**

| EB SR 118 |    | WB SR 118 |     | NB SR 34 |     | SB Donlon Rd. |    |
|-----------|----|-----------|-----|----------|-----|---------------|----|
| TH        | RT | LT        | TH  | LT       | RT  | LT            | RT |
| 420       | 10 | 600       | 410 | 70       | 570 | 10            | 20 |

**AM Peak – Intersection Improvement Alt. & Bridge Alt.**

| EB SR 118 |     |    | WB SR 118 |     |    | NB SR 34 |    |     | SB Donlon Rd. |     |    |
|-----------|-----|----|-----------|-----|----|----------|----|-----|---------------|-----|----|
| LT        | TH  | RT | LT        | TH  | RT | LT       | TH | RT  | LT            | TH  | RT |
| 50        | 360 | 10 | 480       | 410 | 10 | 70       | 40 | 540 | 10            | 120 | 20 |

**AM Peak – Save Our Somis (SOS) Alt.**

| EB SR 118 |     |    | WB SR 118 |     |    | NB SR 34 |    |     | SB Donlon Rd. |     |    |
|-----------|-----|----|-----------|-----|----|----------|----|-----|---------------|-----|----|
| LT        | TH  | RT | LT        | TH  | RT | LT       | TH | RT  | LT            | TH  | RT |
| 50        | 360 | 10 | 480       | 410 | 10 | 70       | 40 | 540 | 10            | 120 | 20 |

**AM Peak – Roundabout**

|            | EB  | WB  | NB  | SB  |
|------------|-----|-----|-----|-----|
| LT Traffic | 50  | 480 | 70  | 10  |
| TH Traffic | 360 | 410 | 40  | 120 |
| RT Traffic | 10  | 10  | 540 | 20  |

105960 VEN 118/34 FUTURE PROJECTIONS (2035)  
Volume (vph)

AM Peak - Somis Bypass North Intersection

| EB 118 |     | WB 118 |     | Bypass |
|--------|-----|--------|-----|--------|
| TH     | LT  | TH     | RT  |        |
| 370    | 480 | 410    | 540 |        |

PM Peak - Somis Bypass North Intersection

| EB 118 |     | WB 118 |     | Bypass |
|--------|-----|--------|-----|--------|
| TH     | LT  | TH     | RT  |        |
| 420    | 400 | 520    | 550 |        |

AM Peak - Somis Bypass Southern Intersection

| Bypass |     | NB 34 |     | SB 34 |
|--------|-----|-------|-----|-------|
| LT     | TH  | RT    | TH  |       |
| 480    | 110 | 540   | 120 |       |

PM Peak - Somis Bypass Southern Intersection

| Bypass |     | NB 34 |     | SB 34 |
|--------|-----|-------|-----|-------|
| LT     | TH  | RT    | TH  |       |
| 400    | 190 | 550   | 100 |       |

**105960 VEN 118/34 FUTURE PROJECTIONS (2015)**  
**Volume (vph)**

**AM Peak – Existing Alignment with Bypass Alternative**

| EB SR 118 |     |    | WB SR 118 |    |    | NB SR 34 |    |     | SB Donlon Rd. |    |    |
|-----------|-----|----|-----------|----|----|----------|----|-----|---------------|----|----|
| LT        | TH  | RT | TH        | RT | LT | TH       | LT | TH  | RT            | LT | TH |
| 50        | 320 | 10 | 360       | 10 | 70 | 30       | 10 | 100 | 10            |    |    |

**PM Peak – Existing Alignment with Bypass Alternative**

| EB SR 118 |     |    | WB SR 118 |    |     | NB SR 34 |    |    | SB Donlon Rd. |    |    |
|-----------|-----|----|-----------|----|-----|----------|----|----|---------------|----|----|
| LT        | TH  | RT | TH        | RT | LT  | TH       | LT | TH | RT            | LT | TH |
| 20        | 340 | 10 | 450       | 10 | 100 | 70       | 30 | 70 | 30            |    |    |

**FUTURE PROJECTIONS (2035)**

**AM Peak – Existing Alignment with Bypass Alternative**

| EB SR 118 |     |    | WB SR 118 |    |    | NB SR 34 |    |     | SB Donlon Rd. |    |    |
|-----------|-----|----|-----------|----|----|----------|----|-----|---------------|----|----|
| LT        | TH  | RT | TH        | RT | LT | TH       | LT | TH  | RT            | LT | TH |
| 50        | 360 | 10 | 410       | 10 | 70 | 40       | 10 | 120 | 20            |    |    |

**PM Peak – Existing Alignment with Bypass Alternative**

| EB SR 118 |     |    | WB SR 118 |    |     | NB SR 34 |    |    | SB Donlon Rd. |    |    |
|-----------|-----|----|-----------|----|-----|----------|----|----|---------------|----|----|
| LT        | TH  | RT | TH        | RT | LT  | TH       | LT | TH | RT            | LT | TH |
| 30        | 380 | 10 | 510       | 10 | 120 | 70       | 30 | 80 | 40            |    |    |

CEPAC HOLDING 7-0687

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**FUTURE PROJECTIONS (2035)**  
**Volume (vph)**

**PM Peak – Existing Alignment**

| EB SR 118 |    | WB SR 118 |     |     | NB SR 34 |    |    | SB Donlon Rd. |    |  |
|-----------|----|-----------|-----|-----|----------|----|----|---------------|----|--|
| TH        | RT | LT        | TH  | LT  | RT       | LT | RT | LT            | RT |  |
| 410       | 10 | 480       | 510 | 120 | 630      | 30 | 40 |               |    |  |

**PM Peak – Intersection Improvement Alt. & Bridge Alt.**

| EB SR 118 |     |    | WB SR 118 |     |    | NB SR 34 |    |     | SB Donlon Rd. |    |    |
|-----------|-----|----|-----------|-----|----|----------|----|-----|---------------|----|----|
| LT        | TH  | RT | LT        | TH  | RT | LT       | TH | RT  | LT            | TH | RT |
| 30        | 380 | 10 | 400       | 510 | 10 | 120      | 70 | 550 | 30            | 80 | 40 |

**PM Peak – Save Our Somis (SOS) Alt.**

| EB SR 118 |     |    | WB SR 118 |     |    | NB SR 34 |    |     | SB Donlon Rd. |    |    |
|-----------|-----|----|-----------|-----|----|----------|----|-----|---------------|----|----|
| LT        | TH  | RT | LT        | TH  | RT | LT       | TH | RT  | LT            | TH | RT |
| 30        | 350 | 10 | 400       | 510 | 10 | 120      | 70 | 550 | 30            | 80 | 40 |

**PM Peak – Roundabout**

|            | EB  | WB  | NB  | SB |
|------------|-----|-----|-----|----|
| LT Traffic | 30  | 400 | 120 | 30 |
| TH Traffic | 380 | 510 | 70  | 80 |
| RT Traffic | 10  | 10  | 550 | 40 |

| RTE               | DIST              | CTNY              | POST<br>MILE      | E<br>G            | DESCRIPTION   | L                 | VEHICLE<br>AADT<br>TOTAL | TRUCK<br>AADT<br>TOTAL | TRUCK<br>TOT<br>VEH | TRUCK<br>AADT<br>TOTAL | TRUCK<br>TOT<br>VEH | %<br>By Axle<br>2<br>3<br>4<br>5+ | %<br>By Axle<br>3<br>4<br>5+ | %<br>TRUCK AADT<br>3<br>4<br>5+ | EAL<br>2-WAY<br>(1000) | YEAR<br>VER/<br>EST |       |      |     |
|-------------------|-------------------|-------------------|-------------------|-------------------|---|-------------------|--------------------------|------------------------|---------------------|------------------------|---------------------|-----------------------------------|------------------------------|---------------------------------|------------------------|---------------------|-------|------|-----|
|                   |                   |                   |                   |                   |   |                   |                          |                        |                     |                        |                     |                                   |                              |                                 |                        |                     |       |      |     |
| A<br>JCT.<br>ROAD | B<br>JCT.<br>ROAD | C<br>JCT.<br>ROAD | D<br>JCT.<br>ROAD | E<br>JCT.<br>ROAD | F<br>JCT.<br>ROAD   | G<br>JCT.<br>ROAD |                          |                        |                     |                        |                     |                                   |                              |                                 |                        |                     |       |      |     |
| 118               | 07                | VEN               | .516              | A                 | VENTURA, JCT. RTE.<br>126, SANTA PAULA<br>FREEWAY                     |                   | 37500                    | 3908                   | 10.42               | 1387                   | 591                 | 258                               | 1673                         | 35.48                           | 15.13                  | 6.59                | 42.8  | 718  | 07V |
| 118               | 07                | VEN               | 2.2               | B                 | JCT. RTE. 232,<br>VINEYARD AVENUE                                     |                   | 36500                    | 4307                   | 11.8                | 1406                   | 563                 | 269                               | 2069                         | 32.64                           | 13.08                  | 6.24                | 48.04 | 854  | 07V |
| 118               | 07                | VEN               | 2.2               | A                 | JCT. RTE. 232,<br>VINEYARD AVENUE                                     |                   | 24800                    | 2899                   | 11.69               | 893                    | 554                 | 271                               | 1181                         | 30.8                            | 19.11                  | 9.34                | 40.75 | 530  | 07V |
| 118               | 07                | VEN               | 10.92             | B                 | JCT. RTE. 34,<br>SOMIS<br>ROAD  |                   | 11700                    | 3000<br><u>25.64</u>   | 936                 | 526                    | 243                 | 1296                              | 31.19                        | 17.52                           | 8.1                    | 43.19               | 564   | 07E  |     |
| 118               | 07                | VEN               | 10.92             | A                 | JCT. RTE. 34,<br>SOMIS<br>ROAD  |                   | 18400                    | 3657<br><u>19.85</u>   | 1153                | 582                    | 250                 | 1667                              | 31.58                        | 15.93                           | 6.85                   | 45.64               | 706   | 07E  |     |
| 118               | 07                | VEN               | 17.494            | B                 | MOORPARK, WEST JCT.<br>RTE. 23, MOORPARK<br>AVENUE                    |                   | 33000                    | 4307                   | 13.05               | 1377                   | 618                 | 242                               | 2071                         | 31.97                           | 14.34                  | 5.61                | 48.08 | 855  | 07V |
| 118               | 07                | VEN               | R17.905           | B                 | MOORPARK, EAST JCT.<br>RTE. 23, AT SPRING<br>ROAD                     |                   | 36500                    | 4763                   | 13.05               | 1523                   | 683                 | 267                               | 2290                         | 31.97                           | 14.34                  | 5.61                | 48.08 | 945  | 07E |
| 118               | 07                | VEN               | T18.21            | A                 | MOORPARK, JCT. RTE.<br>23, MOORPARK FREEWAY                           |                   | 76000                    | 4241                   | 5.58                | 1684                   | 911                 | 240                               | 1406                         | 39.7                            | 21.48                  | 5.67                | 33.15 | 663  | 07E |
| 118               | 07                | VEN               | R27.811           | O                 | TAPO STREET   |                   | 119000                   | 4712                   | 3.96                | 1871                   | 1012                | 267                               | 1562                         | 39.7                            | 21.48                  | 5.67                | 33.15 | 737  | 07V |
| 118               | 07                | LA                | R1.799            | B                 | LOS ANGELES, JCT. RTE.<br>27, TOPANGA CANYON<br>BOULEVARD INTERCHANGE |                   | 124000                   | 6374                   | 5.14                | 3002                   | 1075                | 327                               | 1970                         | 47.1                            | 16.86                  | 5.13                | 30.91 | 932  | 07E |
| 118               | 07                | LA                | R1.799            | A                 | LOS ANGELES, JCT. RTE.<br>27, TOPANGA CANYON<br>BOULEVARD INTERCHANGE |                   | 133000                   | 8033                   | 6.04                | 4132                   | 1137                | 387                               | 2378                         | 51.44                           | 14.15                  | 4.82                | 29.6  | 1127 | 07E |
| 118               | 07                | LA                | R9.805            | B                 | LOS ANGELES, JCT. RTE.<br>405, SAN DIEGO FREEWAY<br>INTERCHANGE       |                   | 234000                   | 9688                   | 4.14                | 5260                   | 1198                | 447                               | 2783                         | 54.29                           | 12.37                  | 4.61                | 28.73 | 1320 | 07V |
| 118               | 07                | LA                | R11.447           | A                 | LOS ANGELES, JCT. RTE.<br>5, GOLDEN STATE<br>FREEWAY INTERCHANGE      |                   | 212000                   | 15773                  | 7.44                | 6702                   | 2528                | 1142                              | 5401                         | 42.49                           | 16.03                  | 7.24                | 34.24 | 2498 | 06V |
| 118               | 07                | LA                | 144000            | 3715              | 2.58  | 2197              | 374                      | 150                    | 993                 | 59.15                  | 10.06               | 4.05                              | 26.74                        | 476                             | 06E                    |                     |       |      |     |

| RTE DIST CNTY   | POST MILE | E | G | DESCRIPTION | VEHICLE AADT | TRUCK AADT | TOTAL | TRUCK AADT | TOTAL | % TRUCK AADT | EAL  | YEAR VER/EST |       |       |       |     |     |
|---|-----------|---|---|-------------|--------------|------------|-------|------------|-------|--------------|------|--------------|-------|-------|-------|-----|-----|
|   |           |   |   |             |              |            |       |            |       |              |      |              |       |       |       |     |     |
|   |           |   |   |             | TOTAL        | VEH        | 2     | 3          | 4     | 5+           | 2    | 3            | 4     |       |       |     |     |
| 034 07 VEN 4.295 A OXNARD, JCT. RTE. 1,<br>OXNARD BOULEVARD       |           |   |   |             | 13700        | 747        | 5.45  | 482        | 81    | 33           | 151  | 64.48        | 10.9  | 4.47  | 20.15 | 81  | 06V |
| 034 07 VEN 5.285 B OXNARD, ROSE AVENUE                            |           |   |   |             | 15300        | 2151       | 14.06 | 1022       | 454   | 139          | 536  | 47.5         | 21.1  | 6.48  | 24.92 | 283 | 06V |
| 034 07 VEN 6.27 A OXNARD, RICE AVENUE                             |           |   |   |             | 12500        | 1000       | 8     | 468        | 179   | 91           | 263  | 46.8         | 17.85 | 9.06  | 26.29 | 137 | 06V |
| 034 07 VEN R13.603 B CAMARILLO, JCT. RTE.<br>101, VENTURA FREEWAY |           |   |   |             | 22800        | 3516       | 15.42 | 731        | 1043  | 880          | 862  | 20.79        | 29.66 | 25.04 | 24.51 | 548 | 06V |
| 034 07 VEN 13.603 A CAMARILLO, JCT. RTE.<br>101, VENTURA FREEWAY  |           |   |   |             | 22800        | 4562       | 20.01 | 1088       | 1180  | 1001         | 1293 | 23.86        | 25.86 | 21.94 | 28.34 | 740 | 06V |
| 034 07 VEN 17.663 B SOMIS, JCT. RTE. 118,<br>LOS ANGELES AVENUE   |           |   |   |             | 12600        | 1787       | 14.18 | 612        | 205   | 187          | 783  | 34.24        | 11.45 | 10.48 | 43.83 | 338 | 06V |

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**ATTACHMENT 4**

**EXISTING TRAFFIC SIGNAL  
TIMING/PHASING**

**CALTRANS**  
Model 170 Controller  
Traffic Design Branch  
District 7

Version 3.0

LOCATION: Los Angeles Avenue at Somis Road

CO: Ven RTE: 34 P.M.: 17.66

1 OF 6

## CONTROL CODE "F"

| INTERVAL      | PHASE TIMING |                |   |          |   |          |   |          | C                | D          | E            | PRE-EMPTION     | F                |   |
|---------------|--------------|----------------|---|----------|---|----------|---|----------|------------------|------------|--------------|-----------------|------------------|---|
|               | 1            | 2              | 3 | 4        | 5 | 6        | 7 | 8        |                  | TB SEL     | EV SEL       | FZ PERMIT       | RR1 CLR          |   |
| 0 WALK        | 0            | 8              |   | 6        |   | 0        |   | 0        | GAP SET          | MAX        |              |                 |                  | 0 |
| 1 DONT WALK   | 0            | 10             |   | 6        |   | 0        |   | 0        | SET              | TB         | RR1          |                 |                  | 1 |
| 2 MIN GREEN   | 15           | 15             |   | 2        |   | 15       |   | 6        | C- SERV          | TB         | DLY          | RED YEL LOCK    |                  | 2 |
| 3 TYPE 3 DET  | 0            | 0              |   | 0        |   | 0        |   | 0        |                  | MIN        |              | VEH             | X                | 3 |
| 4 ADDED / ACT | 3.0          | 3.0            |   | 0.0      |   | 3.0      |   | 0.0      |                  | PED        | 1            | PED             | RECALL           | 4 |
| 5 PASSAGE     | 6.0          | 6.0            |   | 1.0      |   | 8.0      |   | 3.0      |                  | SEL        |              | PERM            | PED              | 5 |
| 6 MAX GAP     | 10.0         | 10.0           |   | 1.0      |   | 12.0     |   | 3.0      |                  | CLR        |              | PHASES          | PERM             | 6 |
| 7 MIN GAP     | 4.0          | 4.0            |   | 1.0      |   | 4.0      |   | 3.0      |                  |            |              | EVC DLY         | ARROW            | 7 |
| 8 MAX EXT 1   | 65           | 35             |   | 5        |   | 60       |   | 20       | OFF SEEK         | EVD        | DLY          | DOUBLE ENTRY    | EVC CLR          | 8 |
| 9 MAX EXT 2   | 110          | 65             |   | 5        |   | 120      |   | 35       |                  | CLR        |              | MAX 2           | MAX 2            | 9 |
| A MAX EXT 3   | 100          | 75             |   | 5        |   | 110      |   | 40       | OLA              | EV         | MAX          | LAG PHASES      | OBSERVATION ONLY | A |
| B             |              |                |   |          |   |          |   |          | GRN              | RR2        | RED REST     |                 |                  | B |
| C REDUCE BY   | 0.2          | 0.2            |   | 0.0      |   | 0.2      |   | 0.0      | OLB              | CLR        |              |                 |                  | C |
| D " EVERY     | 1.0          | 1.0            |   | 0.0      |   | 1.0      |   | 0.0      | OLC              | EV CLR TMR | REST IN WALK |                 |                  | D |
| E YELLOW      | 4.5          | 4.5            |   | 3.0      |   | 4.5      |   | 4.0      | GRN              | DLY TMR    | MAX 3        | YEL             | RR CLR TMR       | E |
| F ALL RED     | 1.5          | 2.0            |   | 0.0      |   | 2.0      |   | 1.5      | RAM ADD          | EV MAX TMR | START-UP     | FIRST PHASE     |                  | F |
| DIRECTION     | WBLT EBL     | WB Los Angeles |   | NB Somis |   |          |   |          |                  |            |              |                 |                  |   |
| DATE          | 04 25 02     | 01 20 05       |   | 01 20 05 |   | 01 20 05 |   | 01 20 05 | DATE START:      | 0          |              | LONG FAIL       | CLK RST          | 9 |
| BY            | RC           | RC             |   | RC       |   | RC       |   | RC       | DATE SUPERSEDED: | 0          |              | SHORT FAIL      | YEAR             |   |
|               |              |                |   |          |   |          |   |          | —                | 04/25/2004 | A            | MAX-VAR-INIT    | MONTH            |   |
|               |              |                |   |          |   |          |   |          |                  |            | B            | RED REVERT      | SECOND           |   |
|               |              |                |   |          |   |          |   |          |                  |            | C            | FILENAME: somis | DAY OF MO        |   |

| OVERLAP PHASES |              |
|----------------|--------------|
| A              | C LONG FAIL  |
| B              | D SHORT FAIL |
| C              | E HOUR       |
| D              | F MINUTE     |
|                | G SECOND     |

NOTES AND REMARKS:

LOCATION : Los Angeles Avenue at Somis Road

CONTROL CODE "C"

**LOCATION:** Los Angeles Avenue at Somis Road

CO: Ven RTE: 34 P.M.: 17.66 3 OF 6

CONTROL CODE "E"

(THIS PAGE @ F-C-F = 0)

| CONTROL CODE "E"   |                 |          |   |            |   |          |   |            |   | (THIS PAGE @ F-C-F = 0) |   |                  |   |   |   |   |   |
|--|-----------------|----------|---|------------|---|----------|---|------------|---|-------------------------|---|------------------|---|---|---|---|---|
|  |                 | E        |   | F          |   | E        |   | F          |   | E                       |   |                  |   |   |   |   |   |
|  |                 | FUNCTION |   | PHASE FLAG |   | FUNCTION |   | PHASE FLAG |   | FUNCTION                |   |                  |   |   |   |   |   |
|  |                 | 1        | 2 | 3          | 4 | 5        | 6 | 7          | 8 | 1                       | 2 | 3                | 4 | 5 | 6 | 7 | 8 |
| 0  |                 |          |   |            |   |          |   |            |   | C. SERV. CODE 4         |   |                  |   |   |   |   | 0 |
| 1  |                 |          |   |            |   |          |   |            |   | C. SERV. CODE 5         |   |                  |   |   |   |   | 1 |
| 2  |                 |          |   |            |   |          |   |            |   | Y CORD RECALL C         |   |                  |   |   |   |   | 2 |
| 3  |                 |          |   |            |   |          |   |            |   | Y CORD RECALL D         |   |                  |   |   |   |   | 3 |
| 5  |                 |          |   |            |   |          |   |            |   | 2 PED OUTPUT            | X |                  |   |   |   |   | 5 |
| 6  |                 |          |   |            |   |          |   |            |   | 6 PED OUTPUT            |   |                  |   |   |   |   | 6 |
| 7  |                 |          |   |            |   |          |   |            |   | 4 PED OUTPUT            |   |                  |   |   |   |   | 7 |
| 8  |                 |          |   |            |   |          |   |            |   | 8 PED OUTPUT            |   |                  |   |   |   |   | 8 |
| A  | OVERLAP "A" NOT |          |   |            |   |          |   |            |   | OVERLAP "A" ON          |   |                  |   |   |   |   | A |
| B  | OVERLAP "B" NOT |          |   |            |   |          |   |            |   | OVERLAP "B" ON          |   |                  |   |   |   |   | B |
| C  | OVERLAP "C" NOT |          |   |            |   |          |   |            |   | OVERLAP "C" ON          |   |                  |   |   |   |   | C |
| D  | OVERLAP "D" NOT |          |   |            |   |          |   |            |   | OVERLAP "D" ON          |   |                  |   |   |   |   | D |
| NOTE : IF THIS IS THE MASTER FOR THE SYSTEM, ENTER NO. OF SLAVES IN RAM LOCATION : |                 |          |   |            |   |          |   |            |   | D-0-0 =                 |   | DATE START:      |   |   |   |   |   |
|  |                 |          |   |            |   |          |   |            |   | 01/20/2005              |   | DATE SUPERSEDED: |   |   |   |   |   |
|  |                 |          |   |            |   |          |   |            |   | 04/25/2004              |   |                  |   |   |   |   |   |

CONTROL CODE "D"

LOCATION: Los Angeles Avenue at Somis RoadCO: Ven RTE: 34 P.M.: 17.66 4 OF 6**CONTROL CODE "9"** (C-0-9 = 0 OR 1)

| HR<br>(HH) | MIN<br>(MM) | CP | OFS | S | M | T | W | F | S | HR<br>(HH) | MIN<br>(MM) | CP | OFS | S | M | T | W | F | S |
|------------|-------------|----|-----|---|---|---|---|---|---|------------|-------------|----|-----|---|---|---|---|---|---|
|            |             |    |     | 1 | 2 | 3 | 4 | 5 | 6 |            |             |    |     | 1 | 2 | 3 | 4 | 5 | 6 |
| 0          |             |    | E   |   |   |   |   |   |   | 0          |             |    |     |   |   |   |   |   |   |
| 1          |             |    | E   |   |   |   |   |   |   | 1          |             |    |     |   |   |   |   |   |   |
| 2          |             |    | E   |   |   |   |   |   |   | 2          |             |    |     |   |   |   |   |   |   |
| 3          |             |    | E   |   |   |   |   |   |   | 3          |             |    |     |   |   |   |   |   |   |
| 4          |             |    | E   |   |   |   |   |   |   | 4          |             |    |     |   |   |   |   |   |   |
| 5          |             |    | E   |   |   |   |   |   |   | 5          |             |    |     |   |   |   |   |   |   |
| 6          |             |    | E   |   |   |   |   |   |   | 6          |             |    |     |   |   |   |   |   |   |
| 7          |             |    | E   |   |   |   |   |   |   | 7          |             |    |     |   |   |   |   |   |   |
| 8          |             |    | E   |   |   |   |   |   |   | 8          |             |    |     |   |   |   |   |   |   |
| 9          |             |    | E   |   |   |   |   |   |   | 9          |             |    |     |   |   |   |   |   |   |
| A          |             |    | E   |   |   |   |   |   |   | A          |             |    |     |   |   |   |   |   |   |
| B          |             |    | E   |   |   |   |   |   |   | B          |             |    |     |   |   |   |   |   |   |
| C          |             |    | E   |   |   |   |   |   |   | C          |             |    |     |   |   |   |   |   |   |
| D          |             |    | E   |   |   |   |   |   |   | D          |             |    |     |   |   |   |   |   |   |
| E          |             |    | E   |   |   |   |   |   |   | E          |             |    |     |   |   |   |   |   |   |
| F          |             |    | E   |   |   |   |   |   |   | F          |             |    |     |   |   |   |   |   |   |

**CONTROL CODE "9"** (C-0-9 = 0 OR 1)

| HR<br>(HH) | MIN<br>(MM) | CP | OFS | S | M | T | W | F | S | HR<br>(HH) | MIN<br>(MM) | CP | OFS | S | M | T | W | F | S |
|------------|-------------|----|-----|---|---|---|---|---|---|------------|-------------|----|-----|---|---|---|---|---|---|
|            |             |    |     | 1 | 2 | 3 | 4 | 5 | 6 |            |             |    |     | 1 | 2 | 3 | 4 | 5 | 6 |
| 0          |             |    | E   |   |   |   |   |   |   | 0          |             |    |     |   |   |   |   |   |   |
| 1          |             |    | E   |   |   |   |   |   |   | 1          |             |    |     |   |   |   |   |   |   |
| 2          |             |    | E   |   |   |   |   |   |   | 2          |             |    |     |   |   |   |   |   |   |
| 3          |             |    | E   |   |   |   |   |   |   | 3          |             |    |     |   |   |   |   |   |   |
| 4          |             |    | E   |   |   |   |   |   |   | 4          |             |    |     |   |   |   |   |   |   |
| 5          |             |    | E   |   |   |   |   |   |   | 5          |             |    |     |   |   |   |   |   |   |
| 6          |             |    | E   |   |   |   |   |   |   | 6          |             |    |     |   |   |   |   |   |   |
| 7          |             |    | E   |   |   |   |   |   |   | 7          |             |    |     |   |   |   |   |   |   |
| 8          |             |    | E   |   |   |   |   |   |   | 8          |             |    |     |   |   |   |   |   |   |
| 9          |             |    | E   |   |   |   |   |   |   | 9          |             |    |     |   |   |   |   |   |   |
| A          |             |    | E   |   |   |   |   |   |   | A          |             |    |     |   |   |   |   |   |   |
| B          |             |    | E   |   |   |   |   |   |   | B          |             |    |     |   |   |   |   |   |   |
| C          |             |    | E   |   |   |   |   |   |   | C          |             |    |     |   |   |   |   |   |   |
| D          |             |    | E   |   |   |   |   |   |   | D          |             |    |     |   |   |   |   |   |   |
| E          |             |    | E   |   |   |   |   |   |   | E          |             |    |     |   |   |   |   |   |   |
| F          |             |    | E   |   |   |   |   |   |   | F          |             |    |     |   |   |   |   |   |   |

**CONTROL CODE "7"**

| HR<br>(HH) | MIN<br>(MM) | ACT | ON | S | M | T | W | F | S | HR<br>(HH) | MIN<br>(MM) | CP | OFS | S | M | T | W | F | S |
|------------|-------------|-----|----|---|---|---|---|---|---|------------|-------------|----|-----|---|---|---|---|---|---|
|            |             |     | 0  | 1 | 2 | 3 | 4 | 5 | 6 |            |             |    |     | 1 | 2 | 3 | 4 | 5 | 6 |
| 0          | 06          | 00  | 2  | E | X | X | X | X | X | 0          | 1           | 2  | 3   | 4 | 5 | 6 | 7 |   |   |
| 1          | 09          | 00  | 2  | E | X | X | X | X | X | 1          | 0           | 1  | 2   | 3 | 4 | 5 | 6 | 7 |   |
| 2          | 15          | 00  | 3  | E | X | X | X | X | X | 2          | 15          | 00 | 3   | 4 | 5 | 6 | 7 |   |   |
| 3          | 18          | 30  | 3  | E | X | X | X | X | X | 3          | 18          | 30 | 3   | 4 | 5 | 6 | 7 |   |   |
| 4          |             |     | E  |   |   |   |   |   |   | 4          |             |    |     |   |   |   |   |   |   |
| 5          |             |     | E  |   |   |   |   |   |   | 5          |             |    |     |   |   |   |   |   |   |
| 6          |             |     | E  |   |   |   |   |   |   | 6          |             |    |     |   |   |   |   |   |   |
| 7          |             |     | E  |   |   |   |   |   |   | 7          |             |    |     |   |   |   |   |   |   |
| 8          |             |     | E  |   |   |   |   |   |   | 8          |             |    |     |   |   |   |   |   |   |
| 9          |             |     | E  |   |   |   |   |   |   | 9          |             |    |     |   |   |   |   |   |   |
| A          |             |     | E  |   |   |   |   |   |   | A          |             |    |     |   |   |   |   |   |   |
| B          |             |     | E  |   |   |   |   |   |   | B          |             |    |     |   |   |   |   |   |   |
| C          |             |     | E  |   |   |   |   |   |   | C          |             |    |     |   |   |   |   |   |   |
| D          |             |     | E  |   |   |   |   |   |   | D          |             |    |     |   |   |   |   |   |   |
| E          |             |     | E  |   |   |   |   |   |   | E          |             |    |     |   |   |   |   |   |   |
| F          |             |     | E  |   |   |   |   |   |   | F          |             |    |     |   |   |   |   |   |   |

**CONTROL CODE "9"** (C-0-9 = 2)

| HR<br>(HH) | MIN<br>(MM) | CP | OFS | S | M | T | W | F | S | HR<br>(HH) | MIN<br>(MM) | CP | OFS | S | M | T | W | F | S |
|------------|-------------|----|-----|---|---|---|---|---|---|------------|-------------|----|-----|---|---|---|---|---|---|
|            |             |    |     | 1 | 2 | 3 | 4 | 5 | 6 |            |             |    |     | 1 | 2 | 3 | 4 | 5 | 6 |
| 0          |             |    | E   |   |   |   |   |   |   | 0          |             |    |     |   |   |   |   |   |   |
| 1          |             |    | E   |   |   |   |   |   |   | 1          |             |    |     |   |   |   |   |   |   |
| 2          |             |    | E   |   |   |   |   |   |   | 2          |             |    |     |   |   |   |   |   |   |
| 3          |             |    | E   |   |   |   |   |   |   | 3          |             |    |     |   |   |   |   |   |   |
| 4          |             |    | E   |   |   |   |   |   |   | 4          |             |    |     |   |   |   |   |   |   |
| 5          |             |    | E   |   |   |   |   |   |   | 5          |             |    |     |   |   |   |   |   |   |
| 6          |             |    | E   |   |   |   |   |   |   | 6          |             |    |     |   |   |   |   |   |   |
| 7          |             |    | E   |   |   |   |   |   |   | 7          |             |    |     |   |   |   |   |   |   |
| 8          |             |    | E   |   |   |   |   |   |   | 8          |             |    |     |   |   |   |   |   |   |
| 9          |             |    | E   |   |   |   |   |   |   | 9          |             |    |     |   |   |   |   |   |   |
| A          |             |    | E   |   |   |   |   |   |   | A          |             |    |     |   |   |   |   |   |   |
| B          |             |    | E   |   |   |   |   |   |   | B          |             |    |     |   |   |   |   |   |   |
| C          |             |    | E   |   |   |   |   |   |   | C          |             |    |     |   |   |   |   |   |   |
| D          |             |    | E   |   |   |   |   |   |   | D          |             |    |     |   |   |   |   |   |   |
| E          |             |    | E   |   |   |   |   |   |   | E          |             |    |     |   |   |   |   |   |   |
| F          |             |    | E   |   |   |   |   |   |   | F          |             |    |     |   |   |   |   |   |   |

**CONTROL CODE "7"**

| HR<br>(HH) | MIN<br>(MM) | ACT | ON | S | M | T | W | F | S | HR<br>(HH) | MIN<br>(MM) | CP | OFS | S | M | T | W | F | S |
|------------|-------------|-----|----|---|---|---|---|---|---|------------|-------------|----|-----|---|---|---|---|---|---|
|            |             |     | 0  | 1 | 2 | 3 | 4 | 5 | 6 |            |             |    |     | 1 | 2 | 3 | 4 | 5 | 6 |
| 0          | 06          | 00  | 2  | E | X | X | X | X | X | 0          | 1           | 2  | 3   | 4 | 5 | 6 | 7 |   |   |
| 1          | 09          | 00  | 2  | E | X | X | X | X | X | 1          | 0           | 1  | 2   | 3 | 4 | 5 | 6 | 7 |   |
| 2          | 15          | 00  | 3  | E | X | X | X | X | X | 2          | 15          | 00 | 3   | 4 | 5 | 6 | 7 |   |   |
| 3          | 18          | 30  | 3  | E | X | X | X | X | X | 3          | 18          | 30 | 3   | 4 | 5 | 6 | 7 |   |   |
| 4          |             |     | E  |   |   |   |   |   |   | 4          |             |    |     |   |   |   |   |   |   |
| 5          |             |     | E  |   |   |   |   |   |   | 5          |             |    |     |   |   |   |   |   |   |
| 6          |             |     | E  |   |   |   |   |   |   | 6          |             |    |     |   |   |   |   |   |   |
| 7          |             |     | E  |   |   |   |   |   |   | 7          |             |    |     |   |   |   |   |   |   |
| 8          |             |     | E  |   |   |   |   |   |   | 8          |             |    |     |   |   |   |   |   |   |
| 9          |             |     | E  |   |   |   |   |   |   | 9          |             |    |     |   |   |   |   |   |   |
| A          |             |     | E  |   |   |   |   |   |   | A          |             |    |     |   |   |   |   |   |   |
| B          |             |     | E  |   |   |   |   |   |   | B          |             |    |     |   |   |   |   |   |   |

LOCATION: Los Angeles Avenue at Somis Road

CO: Ven RTE: 34 P.M.: 17.66 5 OF 6

### CONTROL CODE "D"

| SYSTEM<br>DEFECTOR<br>0 | INPUT<br>SLOT | INPUT |   | DELAY |   | CARRYOVER |   | INPUT<br>SLOT | DELAY | CARRYOVER |
|-------------------------|---------------|-------|---|-------|---|-----------|---|---------------|-------|-----------|
|                         |               | 1     | 2 | 3     | 1 | 2         | 3 |               |       |           |
| 0                       | I1            |       |   |       |   |           |   | J1            |       | 0         |
| 1                       | I2U           |       |   |       |   |           |   | J2U           |       | 1         |
| 2                       | I2L           |       |   |       |   |           |   | J2L           |       | 2         |
| 3                       | I3U           |       |   |       |   |           |   | J3U           |       | 3         |
| 4                       | I3L           |       |   |       |   |           |   | J3L           |       | 4         |
| 5                       | I4            |       |   |       |   |           |   | J4            |       | 5         |
| 6                       | I5            |       |   |       |   |           |   | J5            |       | 6         |
| 7                       | I6U           |       |   |       |   |           |   | J6U           |       | 7         |
| 8                       | I6L           |       |   |       |   |           |   | J6L           |       | 8         |
| 9                       | I7U           |       |   |       |   |           |   | J7U           |       | 9         |
| A                       | I7L           |       |   |       |   |           |   | J7L           |       | A         |
| B                       | I8            |       |   |       |   |           |   | J8            |       | B         |
| C                       | I9U           |       |   |       |   |           |   | J9U           |       | C         |
| D                       | I9L           |       |   |       |   |           |   | J9L           |       | D         |

### NOTES AND REMARKS:

|  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|

### CONTROL CODE "E"

(THIS PAGE @ FCF=123)

| INPUT<br>FILE | C (PHASE DISPLAY) |    |    |    | D (FUNCTION DISPLAY) |    |    |    | E (PHASE DISPLAY) |    |    |    | F (FUNCTION DISPLAY) |    |    |    |
|---------------|-------------------|----|----|----|----------------------|----|----|----|-------------------|----|----|----|----------------------|----|----|----|
|               | RL                | YL | T1 | T2 | RL                   | YL | T1 | T2 | RL                | YL | T1 | T2 | RL                   | YL | T1 | EX |
| 0 I1          | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | 0 J1                 |    |    | *  |
| 1 I2U         | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | 1 J2U                |    |    | *  |
| 2 I2L         | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | 2 J2L                |    |    | *  |
| 3 I3U         | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | 3 J3U                |    |    | *  |
| 4 I3L         | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | 4 J3L                |    |    | *  |
| 5 I4          | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | 5 J4                 |    |    | *  |
| 6 I5          | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | 6 J5                 |    |    | *  |
| 7 I6U         | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | 7 J6U                |    |    | *  |
| 8 I6L         | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | 8 J6L                |    |    | *  |
| 9 I7U         | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | 9 J7U                |    |    | *  |
| A I7L         | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | A J7L                |    |    | *  |
| B I8          | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | B J8                 |    |    | *  |
| C I9U         | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | C J9U                |    |    | *  |
| D I9L         | *                 |    |    |    |                      |    |    |    | *                 | *  |    |    | D J9L                |    |    | *  |

\* = Default Settings

X = New Settings

NOTE: Default settings (\*) should remain unless replaced with new settings (X).

LOCATION: Los Angeles Avenue at Somis RoadCO: Ven RTE: 34 P.M.: 17.66 6 OF 6**CONTROL CODE "8":**

HOLIDAY 1-16 (C-0-8=11)

**CONTROL CODE "8":**

HOLIDAY 1-16 (C-0-8=11)

| DAY<br>(DD) | YEAR<br>(YY) | MONTH<br>(M) | TYPE |   |   |   |   |   |   |
|-------------|--------------|--------------|------|---|---|---|---|---|---|
|             |              |              | 1    | 2 | 3 | 4 | 5 | 6 | 7 |
| 0           |              |              | E    |   |   |   |   |   |   |
| 1           |              |              | E    |   |   |   |   |   |   |
| 2           |              |              | E    |   |   |   |   |   |   |
| 3           |              |              | E    |   |   |   |   |   |   |
| 4           |              |              | E    |   |   |   |   |   |   |
| 5           |              |              | E    |   |   |   |   |   |   |
| 6           |              |              | E    |   |   |   |   |   |   |
| 7           |              |              | E    |   |   |   |   |   |   |
| 8           |              |              | E    |   |   |   |   |   |   |
| 9           |              |              | E    |   |   |   |   |   |   |
| A           |              |              | E    |   |   |   |   |   |   |
| B           |              |              | E    |   |   |   |   |   |   |
| C           |              |              | E    |   |   |   |   |   |   |
| D           |              |              | E    |   |   |   |   |   |   |
| E           |              |              | E    |   |   |   |   |   |   |
| F           |              |              | E    |   |   |   |   |   |   |

| DAY<br>(DD) | YEAR<br>(YY) | MONTH<br>(M) | TYPE |   |   |   |   |   |   |
|-------------|--------------|--------------|------|---|---|---|---|---|---|
|             |              |              | 1    | 2 | 3 | 4 | 5 | 6 | 7 |
| 0           |              |              | E    |   |   |   |   |   |   |
| 1           |              |              | E    |   |   |   |   |   |   |
| 2           |              |              | E    |   |   |   |   |   |   |
| 3           |              |              | E    |   |   |   |   |   |   |
| 4           |              |              | E    |   |   |   |   |   |   |
| 5           |              |              | E    |   |   |   |   |   |   |
| 6           |              |              | E    |   |   |   |   |   |   |
| 7           |              |              | E    |   |   |   |   |   |   |
| 8           |              |              | E    |   |   |   |   |   |   |
| 9           |              |              | E    |   |   |   |   |   |   |
| A           |              |              | E    |   |   |   |   |   |   |
| B           |              |              | E    |   |   |   |   |   |   |
| C           |              |              | E    |   |   |   |   |   |   |
| D           |              |              | E    |   |   |   |   |   |   |
| E           |              |              | E    |   |   |   |   |   |   |
| F           |              |              | E    |   |   |   |   |   |   |

| DAY<br>(DD) | YEAR<br>(YY) | MONTH<br>(M) | TYPE |   |   |   |   |   |   |
|-------------|--------------|--------------|------|---|---|---|---|---|---|
|             |              |              | 1    | 2 | 3 | 4 | 5 | 6 | 7 |
| 0           |              |              | E    |   |   |   |   |   |   |
| 1           |              |              | E    |   |   |   |   |   |   |
| 2           |              |              | E    |   |   |   |   |   |   |
| 3           |              |              | E    |   |   |   |   |   |   |
| 4           |              |              | E    |   |   |   |   |   |   |
| 5           |              |              | E    |   |   |   |   |   |   |
| 6           |              |              | E    |   |   |   |   |   |   |
| 7           |              |              | E    |   |   |   |   |   |   |
| 8           |              |              | E    |   |   |   |   |   |   |
| 9           |              |              | E    |   |   |   |   |   |   |
| A           |              |              | E    |   |   |   |   |   |   |
| B           |              |              | E    |   |   |   |   |   |   |
| C           |              |              | E    |   |   |   |   |   |   |
| D           |              |              | E    |   |   |   |   |   |   |
| E           |              |              | E    |   |   |   |   |   |   |
| F           |              |              | E    |   |   |   |   |   |   |

| DAY<br>(DD) | YEAR<br>(YY) | MONTH<br>(M) | TYPE |   |   |   |   |   |   |
|-------------|--------------|--------------|------|---|---|---|---|---|---|
|             |              |              | 1    | 2 | 3 | 4 | 5 | 6 | 7 |
| 0           |              |              | E    |   |   |   |   |   |   |
| 1           |              |              | E    |   |   |   |   |   |   |
| 2           |              |              | E    |   |   |   |   |   |   |
| 3           |              |              | E    |   |   |   |   |   |   |
| 4           |              |              | E    |   |   |   |   |   |   |
| 5           |              |              | E    |   |   |   |   |   |   |
| 6           |              |              | E    |   |   |   |   |   |   |
| 7           |              |              | E    |   |   |   |   |   |   |
| 8           |              |              | E    |   |   |   |   |   |   |
| 9           |              |              | E    |   |   |   |   |   |   |
| A           |              |              | E    |   |   |   |   |   |   |
| B           |              |              | E    |   |   |   |   |   |   |
| C           |              |              | E    |   |   |   |   |   |   |
| D           |              |              | E    |   |   |   |   |   |   |
| E           |              |              | E    |   |   |   |   |   |   |
| F           |              |              | E    |   |   |   |   |   |   |

| DAY<br>(DD) | YEAR<br>(YY) | MONTH<br>(M) | TYPE |   |   |   |   |   |   |
|-------------|--------------|--------------|------|---|---|---|---|---|---|
|             |              |              | 1    | 2 | 3 | 4 | 5 | 6 | 7 |
| 0           |              |              | E    |   |   |   |   |   |   |
| 1           |              |              | E    |   |   |   |   |   |   |
| 2           |              |              | E    |   |   |   |   |   |   |
| 3           |              |              | E    |   |   |   |   |   |   |
| 4           |              |              | E    |   |   |   |   |   |   |
| 5           |              |              | E    |   |   |   |   |   |   |
| 6           |              |              | E    |   |   |   |   |   |   |
| 7           |              |              | E    |   |   |   |   |   |   |
| 8           |              |              | E    |   |   |   |   |   |   |
| 9           |              |              | E    |   |   |   |   |   |   |
| A           |              |              | E    |   |   |   |   |   |   |
| B           |              |              | E    |   |   |   |   |   |   |
| C           |              |              | E    |   |   |   |   |   |   |
| D           |              |              | E    |   |   |   |   |   |   |
| E           |              |              | E    |   |   |   |   |   |   |
| F           |              |              | E    |   |   |   |   |   |   |

| DAY<br>(DD) | YEAR<br>(YY) | MONTH<br>(M) | TYPE |   |   |   |   |   |   |
|-------------|--------------|--------------|------|---|---|---|---|---|---|
|             |              |              | 1    | 2 | 3 | 4 | 5 | 6 | 7 |
| 0           |              |              | E    |   |   |   |   |   |   |
| 1           |              |              | E    |   |   |   |   |   |   |
| 2           |              |              | E    |   |   |   |   |   |   |
| 3           |              |              | E    |   |   |   |   |   |   |
| 4           |              |              | E    |   |   |   |   |   |   |
| 5           |              |              | E    |   |   |   |   |   |   |
| 6           |              |              | E    |   |   |   |   |   |   |
| 7           |              |              | E    |   |   |   |   |   |   |
| 8           |              |              | E    |   |   |   |   |   |   |
| 9           |              |              | E    |   |   |   |   |   |   |
| A           |              |              | E    |   |   |   |   |   |   |
| B           |              |              | E    |   |   |   |   |   |   |
| C           |              |              | E    |   |   |   |   |   |   |
| D           |              |              | E    |   |   |   |   |   |   |
| E           |              |              | E    |   |   |   |   |   |   |
| F           |              |              | E    |   |   |   |   |   |   |

| DAY<br>(DD) | YEAR<br>(YY) | MONTH<br>(M) | TYPE |   |   |   |   |   |   |
|-------------|--------------|--------------|------|---|---|---|---|---|---|
|             |              |              | 1    | 2 | 3 | 4 | 5 | 6 | 7 |
| 0           |              |              | E    |   |   |   |   |   |   |
| 1           |              |              | E    |   |   |   |   |   |   |
| 2           |              |              | E    |   |   |   |   |   |   |
| 3           |              |              | E    |   |   |   |   |   |   |
| 4           |              |              | E    |   |   |   |   |   |   |
| 5           |              |              | E    |   |   |   |   |   |   |
| 6           |              |              | E    |   |   |   |   |   |   |
| 7           |              |              | E    |   |   |   |   |   |   |
| 8           |              |              | E    |   |   |   |   |   |   |
| 9           |              |              | E    |   |   |   |   |   |   |
| A           |              |              | E    |   |   |   |   |   |   |
| B           |              |              | E    |   |   |   |   |   |   |
| C           |              |              | E    |   |   |   |   |   |   |
| D           |              |              | E    |   |   |   |   |   |   |
| E           |              |              | E    |   |   |   |   |   |   |
| F           |              |              | E    |   |   |   |   |   |   |

| DAY<br>(DD) | YEAR<br>(YY) | MONTH<br>(M) | TYPE |   |   |   |   |   |   |
|-------------|--------------|--------------|------|---|---|---|---|---|---|
|             |              |              | 1    | 2 | 3 | 4 | 5 | 6 | 7 |
| 0           |              |              | E    |   |   |   |   |   |   |
| 1           |              |              | E    |   |   |   |   |   |   |
| 2           |              |              | E    |   |   |   |   |   |   |
| 3           |              |              | E    |   |   |   |   |   |   |
| 4           |              |              | E    |   |   |   |   |   |   |
| 5           |              |              | E    |   |   |   |   |   |   |
| 6           |              |              | E    |   |   |   |   |   |   |
| 7           |              |              | E    |   |   |   |   |   |   |
| 8           |              |              | E    |   |   |   |   |   |   |
| 9           |              |              | E    |   |   |   |   |   |   |
| A           |              |              | E    |   |   |   |   |   |   |
| B           |              |              | E    |   |   |   |   |   |   |
| C           |              |              | E    |   |   |   |   |   |   |
| D           |              |              | E    |   |   |   |   |   |   |
| E           |              |              | E    |   |   |   |   |   |   |
| F           |              |              | E    |   |   |   |   |   |   |

| DAY<br>(DD) | YEAR<br>(YY) | MONTH<br>(M) | TYPE |   |   |   |   |   |   |
|-------------|--------------|--------------|------|---|---|---|---|---|---|
|             |              |              | 1    | 2 | 3 | 4 | 5 | 6 | 7 |
| 0           |              |              | E    |   |   |   |   |   |   |
| 1           |              |              | E    |   |   |   |   |   |   |
| 2           |              |              | E    |   |   |   |   |   |   |
| 3           |              |              | E    |   |   |   |   |   |   |
| 4           |              |              | E    |   |   |   |   |   |   |
| 5           |              |              | E    |   |   |   |   |   |   |
| 6           |              |              | E    |   |   |   |   |   |   |
| 7           |              |              | E    |   |   |   |   |   |   |

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**ATTACHMENT 5**

**LOS AND DELAY ANALYSIS**

# SUMMARY

Update June 2010

| ALTERNATIVE  | LOS<br>(Level Of Service) | DELAY<br>(Seconds) | VOL/CAPACITY<br>RANGE |
|--|---------------------------|--------------------|-----------------------|
| 2008 AM Peak Hour                                    |                           |                    |                       |
| Existing Alignment, AM Peak Hour                     | F                         | 108.0              |                       |
| 2 Wb Left Turn Lane Alignment, AM Peak Hour          | C                         | 29.0               |                       |
| 1 Wb Left Turn Lane Alignment, AM Peak Hour          | C                         | 31.4               |                       |
| Roundabout Alignment, AM Peak Hour                   |                           |                    | 0.16 - 0.73           |
| Bypass Align - Exist 118/34 Intersect., AM Peak Hour | B                         | 19.4               |                       |
| Bypass Align - East Intersect., AM Peak Hour         | C                         | 25.9               |                       |
| Bypass Align - South Intersect., AM Peak Hour        | B                         | 13.6               |                       |
| Bridge Alt. (same config as 2 WB Left Turn Lane)     | C                         | 29.0               |                       |
| 2008 PM Peak Hour                                    |                           |                    |                       |
| Existing Alignment, PM Peak Hour                     | F                         | 188.9              |                       |
| 2 Wb Left Turn Lane Alignment, PM Peak Hour          | C                         | 29.6               |                       |
| 1 Wb Left Turn Lane Alignment, PM Peak Hour          | D                         | 35.3               |                       |
| Roundabout Alignment, PM Peak Hour                   |                           |                    | 0.19 - 0.79           |
| Bypass Align - Exist 118/34 Intersect., PM Peak Hour | D                         | 40.4               |                       |
| Bypass Align - East Intersect., PM Peak Hour         | C                         | 29.7               |                       |
| Bypass Align - South Intersect., PM Peak Hour        | B                         | 12.3               |                       |
| Bridge Alt. (same config as 2 WB Left Turn Lane)     | C                         | 29.6               |                       |
| 2015 AM Peak Hour                                    |                           |                    |                       |
| Existing Alignment, AM Peak Hour                     | F                         | 135.5              |                       |
| 2 Wb Left Turn Lane Alignment, AM Peak Hour          | C                         | 28.9               |                       |
| 1 Wb Left Turn Lane Alignment, AM Peak Hour          | C                         | 32.1               |                       |
| Roundabout Alignment, AM Peak Hour                   |                           |                    | 0.18 - 0.77           |
| Bypass Align - Exist 118/34, Donl Realign., AM Peak  | B                         | 16.4               |                       |
| Bypass Align - Exist 118/34 Intersect., AM Peak Hour | C                         | 20.7               |                       |
| Bypass Align - East Intersect., AM Peak Hour         | C                         | 27.5               |                       |
| Bypass Align - South Intersect., AM Peak Hour        | B                         | 13.8               |                       |
| Bridge Alt. (same config as 2 WB Left Turn Lane)     | C                         | 28.9               |                       |
| 2015 PM Peak Hour                                    |                           |                    |                       |
| Existing Alignment, PM Peak Hour                     | F                         | 194.9              |                       |
| 2 Wb Left Turn Lane Alignment, PM Peak Hour          | C                         | 30.7               |                       |
| 1 Wb Left Turn Lane Alignment, PM Peak Hour          | D                         | 36.7               |                       |
| Roundabout Alignment, PM Peak Hour                   |                           |                    | 0.20 - 0.86           |
| Bypass Align - Exist 118/34, Donl Realign., PM Peak  | B                         | 18.0               |                       |
| Bypass Align - Exist 118/34 Intersect., PM Peak Hour | C                         | 22.2               |                       |
| Bypass Align - East Intersect., PM Peak Hour         | C                         | 34.0               |                       |
| Bypass Align - South Intersect., PM Peak Hour        | B                         | 12.5               |                       |
| Bridge Alt. (same config as 2 WB Left Turn Lane)     | C                         | 30.7               |                       |
| 2035 AM Peak Hour                                    |                           |                    |                       |
| Existing Alignment, AM Peak Hour                     | F                         | 267.5              |                       |
| 2 Wb Left Turn Lane Alignment, AM Peak Hour          | C                         | 31.6               |                       |
| 1 Wb Left Turn Lane Alignment, AM Peak Hour          | D                         | 39.6               |                       |
| Roundabout Alignment, AM Peak Hour                   |                           |                    | 0.23 - 0.89           |
| Bypass Align - Exist 118/34, Donl Realign., AM Peak  | B                         | 17.3               |                       |
| Bypass Align - Exist 118/34 Intersect., AM Peak Hour | C                         | 27.4               |                       |
| Bypass Align - East Intersect., AM Peak Hour         | C                         | 30.5               |                       |
| Bypass Align - South Intersect., AM Peak Hour        | B                         | 14.4               |                       |
| Bridge Alt. (same config as 2 WB Left Turn Lane)     | C                         | 31.6               |                       |

| ALTERNATIVE  | LOS<br>(Level Of Service) | DELAY<br>(Seconds) | VOL/CAPACITY<br>RANGE |
|--|---------------------------|--------------------|-----------------------|
| 2035 PM Peak Hour                                    |                           |                    |                       |
| Existing Alignment, PM Peak Hour                     | F                         | 315.0              |                       |
| 2 Wb Left Turn Lane Alignment, PM Peak Hour          | D                         | 35.8               |                       |
| 1 Wb Left Turn Lane Alignment, PM Peak Hour          | D                         | 52.1               |                       |
| Roundabout Alignment, PM Peak Hour                   |                           |                    | 0.25 - 0.96           |
| Bypass Align - Exist 118/34, Don't Realign., PM Peak | B                         | 19.0               |                       |
| Bypass Align - Exist 118/34 Intersect., PM Peak Hour | C                         | 32.0               |                       |
| Bypass Align - East Intersect., PM Peak Hour         | C                         | 31.1               |                       |
| Bypass Align - South Intersect., PM Peak Hour        | B                         | 13.2               |                       |
| Bridge Alt. (same config as 2 WB Left Turn Lane)     | D                         | 35.8               |                       |

## HCS2000™ DETAILED REPORT

| General Information |                          |  |  |  |  | Site Information |   |  |  |  |  |
|---------------------|--------------------------|--|--|--|--|------------------|---|--|--|--|--|
| Analyst             | trung duong              |  |  |  |  | Intersection     | Ven 118 (L.A. Ave.) & Ven 34                              |  |  |  |  |
| Agency or Co.       | Ventura                  |  |  |  |  | Area Type        | All other areas   |  |  |  |  |
| Date Performed      | 2/2/09                   |  |  |  |  | Jurisdiction     | Current (2008)  |  |  |  |  |
| Time Period         | A.M. Peak - 9/30/08 Data |  |  |  |  | Analysis Year    | Ven 118 & Ven 34/Donlon Inter. Improvement - Exist. Align |  |  |  |  |

## Volume and Timing Input

|   | EB        |          |      | WB    |          |     | NB    |       |       | SB |    |     |
|---|-----------|----------|------|-------|----------|-----|-------|-------|-------|----|----|-----|
|   | LT        | TH       | RT   | LT    | TH       | RT  | LT    | TH    | RT    | LT | TH | RT  |
| Number of lanes, N <sub>l</sub>           | 0         | 1        | 0    | 0     | 1        | 0   | 1     | 0     | 1     | 0  | 0  | 0   |
| Lane group                                |           | TR       |      |       | LT       |     | L     |       | R     |    |    |     |
| Volume, V (vph)                           | 352       | 8        | 502  | 358   |          |     | 63    |       | 484   |    |    |     |
| % Heavy vehicles, %HV                     | 26        | 26       | 20   | 20    |          |     | 14    |       | 14    |    |    |     |
| Peak-hour factor, PHF                     | 1.00      | 1.00     | 1.00 | 1.00  |          |     | 1.00  |       | 1.00  |    |    |     |
| Pretimed (P) or actuated (A)              |           | P        | P    | P     | P        |     | P     |       | P     |    |    |     |
| Start-up lost time, l <sub>1</sub>        | 2.0       |          |      | 2.0   |          |     | 2.0   |       | 2.0   |    |    |     |
| Extension of effective green, e           | 2.0       |          |      | 2.0   |          |     | 2.0   |       | 2.0   |    |    |     |
| Arrival type, AT                          | 3         |          |      | 3     |          |     | 3     |       | 3     |    |    |     |
| Unit extension, UE                        | 3.0       |          |      | 3.0   |          |     | 3.0   |       | 3.0   |    |    |     |
| Filtering/metering, l                     | 1.000     |          |      | 1.000 |          |     | 1.000 | 1.000 | 1.000 |    |    |     |
| Initial unmet demand, Q <sub>b</sub>      | 0.0       |          |      | 0.0   |          |     | 0.0   |       | 0.0   |    |    |     |
| Ped / Bike / RTOR volumes                 | 1         |          | 0    |       |          |     | 0     |       | 0     | 0  |    |     |
| Lane width                                | 12.0      |          |      | 12.0  |          |     | 12.0  |       | 12.0  |    |    |     |
| Parking / Grade / Parking                 | N         | 0        | N    | N     | 0        | N   | N     | 0     | N     | N  |    | N   |
| Parking maneuvers, N <sub>m</sub>         |           |          |      |       |          |     |       |       |       |    |    |     |
| Buses stopping, N <sub>B</sub>            |           | 0        |      |       | 0        |     | 0     |       | 0     |    |    |     |
| Min. time for pedestrians, G <sub>p</sub> |           | 3.2      |      |       |          |     | 3.2   |       | 3.2   |    |    | 3.2 |
| Phasing                                   | WB Only   | EB Only  | 03   | 04    | NB Only  | 06  | 07    | 08    |       |    |    |     |
| Timing                                    | G = 120.0 | G = 65.0 | G =  | G =   | G = 20.0 | G = | G =   | G =   |       |    |    |     |
|   | Y = 6.5   | Y = 6.5  | Y =  | Y =   | Y = 5.5  | Y = | Y =   | Y =   |       |    |    |     |

Duration of Analysis, T =  
1.00

Cycle Length, C = 223.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB    |       |    | WB                    |       |    | NB               |    |       | SB |    |    |
|-------------------------------------|-------|-------|----|-----------------------|-------|----|------------------|----|-------|----|----|----|
|                                     | LT    | TH    | RT | LT                    | TH    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |       | 360   |    |                       | 860   |    | 63               |    | 484   |    |    |    |
| Lane group capacity, c              |       | 437   |    |                       | 826   |    | 142              |    | 922   |    |    |    |
| v/c ratio, X                        |       | 0.82  |    |                       | 1.04  |    | 0.44             |    | 0.52  |    |    |    |
| Total green ratio, g/C              |       | 0.29  |    |                       | 0.54  |    | 0.09             |    | 0.65  |    |    |    |
| Uniform delay, d <sub>1</sub>       |       | 73.9  |    |                       | 51.8  |    | 96.5             |    | 20.7  |    |    |    |
| Progression factor, PF              |       | 1.000 |    |                       | 1.000 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |       | 0.50  |    |                       | 0.50  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |       | 18.2  |    |                       | 110.9 |    | 10.0             |    | 2.2   |    |    |    |
| Initial queue delay, d <sub>3</sub> |       |       |    |                       |       |    |                  |    |       |    |    |    |
| Control delay                       |       | 92.1  |    |                       | 162.7 |    | 106.5            |    | 22.8  |    |    |    |
| Lane group LOS                      |       | F     |    |                       | F     |    | F                |    | C     |    |    |    |
| Approach delay                      | 92.1  |       |    | 162.7                 |       |    | 32.5             |    |       |    |    |    |
| Approach LOS                        | F     |       |    | F                     |       |    | C                |    |       |    |    |    |
| Intersection delay                  | 108.0 |       |    | X <sub>c</sub> = 0.91 |       |    | Intersection LOS |    | F     |    |    |    |

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Version 4.1c

**HCS2000™ DETAILED REPORT**

| General Information |                          |  |  |  |  | Site Information |               |  |  |  |  |
|---------------------|--------------------------|--|--|--|--|------------------|---------------|--|--|--|--|
| Analyst             | trung duong              |  |  |  |  |                  | Intersection  | Ven 118 & Ven 34/Donlon Rd                                 |  |  |  |
| Agency or Co.       | Ventura                  |  |  |  |  |                  | Area Type     | All other areas  |  |  |  |
| Date Performed      | 2/9/2009                 |  |  |  |  |                  | Jurisdiction  |  |  |  |  |
| Time Period         | A.M. Peak - 9/30/08 Data |  |  |  |  |                  | Analysis Year | Current (2008)   |  |  |  |
|                     |                          |  |  |  |  |                  | Project ID    | Ven 118 & Ven 34/Donlon Inter. Improvement - 2 WB LT Lanes |  |  |  |

**Volume and Timing Input**

|   | EB         |           |       | WB    |       |      | NB       |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|-------|------|----------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH    | RT   | LT       | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>1</sub>           | 1          | 1         | 1     | 2     | 1     | 0    | 0        | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR    |      |          | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 46         | 306       | 8     | 405   | 345   | 5    | 63       | 32    | 452   | 8    | 97    | 13   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20    | 20   | 14       | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00  | 1.00 | 1.00     | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P     | P    | P        | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>s</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |      |          | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |      |          | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3     |      |          | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0   |      |          | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, I                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000 |      |          | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0   |      |          | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 0          |           | 0     | 0     |       |      | 0        | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0  |      |          | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0     | N    | N        | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |       |      |          |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0     |      |          | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2   |      |          | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    |       | 04    |      | NS Perm  |       | 06    |      | 07    |      |
| Timing                                    | G = 25.0   | G = 35.0  | G =   |       | G =   |      | G = 23.0 |       | G =   |      | G =   |      |

|                                  |           |       |       |           |       |                          |       |
|----------------------------------|-----------|-------|-------|-----------|-------|--------------------------|-------|
| $Y = 5.5$                        | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 4.5$ | $Y =$ | $Y =$                    | $Y =$ |
| Duration of Analysis, $T = 1.00$ |           |       |       |           |       | Cycle Length, $C = 98.5$ |       |

**Lane Group Capacity, Control Delay, and LOS Determination**

|                            | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|----------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                            | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, $v$    | 46    | 306   | 8     | 405          | 350   |    |                  | 95    | 452   |      | 118   |    |
| Lane group capacity, $c$   | 364   | 536   | 456   | 741          | 561   |    |                  | 302   | 755   |      | 430   |    |
| v/c ratio, $X$             | 0.13  | 0.57  | 0.02  | 0.55         | 0.62  |    |                  | 0.31  | 0.60  |      | 0.27  |    |
| Total green ratio, g/C     | 0.25  | 0.36  | 0.36  | 0.25         | 0.36  |    |                  | 0.23  | 0.53  |      | 0.23  |    |
| Uniform delay, $d_1$       | 28.3  | 25.7  | 20.6  | 31.8         | 26.3  |    |                  | 31.2  | 15.8  |      | 30.9  |    |
| Progression factor, PF     | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, $k$     | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, $d_2$   | 0.7   | 4.4   | 0.1   | 2.9          | 5.3   |    |                  | 2.7   | 3.5   |      | 1.6   |    |
| Initial queue delay, $d_3$ |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay              | 29.0  | 30.1  | 20.7  | 34.8         | 31.6  |    |                  | 34.0  | 19.3  |      | 32.5  |    |
| Lane group LOS             | C     | C     | C     | C            | C     |    |                  | C     | B     |      | C     |    |
| Approach delay             | 29.8  |       |       | 33.3         |       |    | 21.9             |       |       | 32.5 |       |    |
| Approach LOS               | C     |       |       | C            |       |    | C                |       |       | C    |       |    |
| Intersection delay         | 29.0  |       |       | $X_c = 0.61$ |       |    | Intersection LOS |       |       | C    |       |    |

## HCS2000™ DETAILED REPORT

| General Information                  |  |  |  |  |  | Site Information   |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| Analyst trung duong                  |  |  |  |  |  | Intersection Ven 118 & Ven 34/Donlon Rd                              |  |  |  |  |  |
| Agency or Co. Ventura                |  |  |  |  |  | Area-Type All other areas  |  |  |  |  |  |
| Date Performed 2/5/2009              |  |  |  |  |  | Jurisdiction Analysis Year Current (2008)                            |  |  |  |  |  |
| Time Period A.M. Peak - 9/30/08 Data |  |  |  |  |  | Project ID Ven 118 & Ven 34/Donlon Inter. Improvement - 1 WB LT Lane |  |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |          |      | NB   |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|----------|------|------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH       | RT   | LT   | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>1</sub>           | 1          | 1         | 1     | 1     | 1        | 0    | 0    | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR       |      |      | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 46         | 306       | 8     | 405   | 345      | 5    | 63   | 32    | 452   | 8    | 97    | 13   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20       | 20   | 14   | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00     | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P        | P    | P    | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>1</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3        |      |      | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0      |      |      | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, l                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000    |      |      | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0      |      |      | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 1          |           | 0     | 0     |          | 0    | 0    |       | 0     | 0    |       | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0     |      |      | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0        | N    | N    | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |          |      |      |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0        |      |      | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2      |      |      | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    | 04    | NS Perm  |      | 06   | 07    |       | 08   |       |      |
| Timing                                    | G = 33.0   | G = 30.0  | G =   | G =   | G = 16.0 |      | G =  | G =   |       | G =  |       |      |

|                                |           |       |       |           |       |                        |       |
|--------------------------------|-----------|-------|-------|-----------|-------|------------------------|-------|
| $Y = 5.5$                      | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 4.5$ | $Y =$ | $Y =$                  | $Y =$ |
| Duration of Analysis, T = 1.00 |           |       |       |           |       | Cycle Length, C = 94.5 |       |

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|-------------------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                                     | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v               | 46    | 306   | 8     | 405          | 350   |    |                  | 95    | 452   |      | 118   |    |
| Lane group capacity, c              | 500   | 479   | 407   | 525          | 502   |    |                  | 193   | 802   |      | 311   |    |
| v/c ratio, X                        | 0.09  | 0.64  | 0.02  | 0.77         | 0.70  |    |                  | 0.49  | 0.56  |      | 0.38  |    |
| Total green ratio, g/C              | 0.35  | 0.32  | 0.32  | 0.35         | 0.32  |    |                  | 0.17  | 0.57  |      | 0.17  |    |
| Uniform delay, d <sub>1</sub>       | 20.7  | 27.6  | 22.2  | 27.4         | 28.3  |    |                  | 35.6  | 13.1  |      | 34.8  |    |
| Progression factor, PF              | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k                | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, d <sub>2</sub>   | 0.4   | 6.6   | 0.1   | 11.3         | 8.1   |    |                  | 9.0   | 2.9   |      | 3.5   |    |
| Initial queue delay, d <sub>3</sub> |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay                       | 21.0  | 34.2  | 22.2  | 38.7         | 36.4  |    |                  | 44.5  | 15.9  |      | 38.4  |    |
| Lane group LOS                      | C     | C     | C     | D            | D     |    |                  | D     | B     |      | D     |    |
| Approach delay                      | 32.2  |       |       | 37.6         |       |    | 20.9             |       |       | 38.4 |       |    |
| Approach LOS                        | C     |       |       | D            |       |    | C                |       |       | D    |       |    |
| Intersection delay                  | 31.4  |       |       | $X_c = 0.69$ |       |    | Intersection LOS |       |       | C    |       |    |

# ROUNDABOUTS - UNSIGNALIZED INTERSECTIONS WORKSHEET

| General Information |                       | Site Information |                      |
|---------------------|-----------------------|------------------|----------------------|
| Analyst             | trung duong           | Intersection     | Ven 118/34/Donlon Rd |
| Agency/Co.          | Ventura               | Jurisdiction     |                      |
| Date Performed      | 2/10/09               | Analysis Year    | Current (2008)       |
| Time Period         | A.M. Peak - 9/30/2008 |                  |                      |

Project Description Ven 118 & Ven 34/Donlon Intersection Improvement

## Volume Adjustments

|            |                  | EB   | WB   | NB   | SB   |
|------------|------------------|------|------|------|------|
| LT Traffic | Volume, veh/h    | 46   | 405  | 63   | 8    |
|            | PHF              | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate, veh/h | 46   | 405  | 63   | 8    |
| TH Traffic | Volume, veh/h    | 306  | 345  | 32   | 97   |
|            | PHF              | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate, veh/h | 306  | 345  | 32   | 97   |
| RT Traffic | Volume, veh/h    | 8    | 5    | 452  | 13   |
|            | PHF              | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate, veh/h | 8    | 5    | 452  | 13   |

## Approach Flow Computation

| Approach Flow (veh/h) | Va (veh/h) |
|-----------------------|------------|
| Vae                   | 360        |
| Vaw                   | 755        |
| Van                   | 547        |
| Vas                   | 118        |

## Circulating Flow Computation

| Approach Flow (veh/h) | Vc (veh/h) |
|-----------------------|------------|
| Vce                   | 510        |
| Vcw                   | 141        |
| Vcn                   | 360        |
| Vcs                   | 813        |

## Capacity Computation

|           |             | EB   | WB   | NB   | SB   |
|-----------|-------------|------|------|------|------|
| Capacity  | Upper bound | 925  | 1240 | 1043 | 725  |
|           | Lower bound | 747  | 1029 | 852  | 571  |
| v/c Ratio | Upper bound | 0.39 | 0.61 | 0.52 | 0.16 |
|           | Lower bound | 0.48 | 0.73 | 0.64 | 0.21 |

**HCS2000™ DETAILED REPORT**

| General Information                       |             |           |      |      |       | Site Information |  |       |       |      |     |    |
|---|-------------|-----------|------|------|-------|------------------|--|-------|-------|------|-----|----|
| Analyst                                   | trung duong |           |      |      |       | Intersection     | Ven 118 (L.A. Ave.) & Ven 34                               |       |       |      |     |    |
| Agency or Co.                             | Ventura     |           |      |      |       | Area Type        | All other areas  |       |       |      |     |    |
| Date Performed                            | 3/19/09     |           |      |      |       | Jurisdiction     | Analysis Year 2008 (current)                               |       |       |      |     |    |
| Time Period                               | A.M. Peak   |           |      |      |       | Project ID       | Ven 118 & Ven 34/Donlon Inter. - Bypass - Exist. Intersect |       |       |      |     |    |
| Volume and Timing Input                   |             |           |      |      |       |                  |  |       |       |      |     |    |
|   | EB          |           |      | WB   |       |                  | NB   |       |       | SB   |     |    |
|   | LT          | TH        | RT   | LT   | TH    | RT               | LT   | TH    | RT    | LT   | TH  | RT |
| Number of lanes, N <sub>l</sub>           | 0           | 1         | 0    | 0    | 1     | 0                | 1  | 0     | 1     | 0    | 0   | 0  |
| Lane group                                | TR          |           |      | LT   |       |                  | L  |       |       | R    |     |    |
| Volume, V (vph)                           | 352         | 8         | 97   | 358  |       |                  | 63   |       |       | 32   |     |    |
| % Heavy vehicles, %HV                     | 26          | 26        | 20   | 20   |       |                  | 14   |       |       | 14   |     |    |
| Peak-hour factor, PHF                     | 1.00        | 1.00      | 1.00 | 1.00 |       |                  | 1.00   |       |       | 1.00 |     |    |
| Pretimed (P) or actuated (A)              |             | P         | P    | P    | P     |                  | P  |       |       | P    |     |    |
| Start-up lost time, l <sub>1</sub>        | 2.0         |           |      | 2.0  |       |                  | 2.0  |       |       | 2.0  |     |    |
| Extension of effective green, e           | 2.0         |           |      | 2.0  |       |                  | 2.0  |       |       | 2.0  |     |    |
| Arrival type, AT                          |             | 3         |      |      | 3     |                  | 3  |       |       | 3    |     |    |
| Unit extension, UE                        |             | 3.0       |      |      | 3.0   |                  | 3.0  |       |       | 3.0  |     |    |
| Filtering/metering, I                     |             | 1.000     |      |      | 1.000 |                  | 1.000  | 1.000 | 1.000 |      |     |    |
| Initial unmet demand, Q <sub>b</sub>      |             | 0.0       |      |      | 0.0   |                  | 0.0  |       |       | 0.0  |     |    |
| Ped / Bike / RTOR volumes                 | 1           |           | 0    |      |       |                  | 0  |       |       | 0    |     |    |
| Lane width                                |             | 12.0      |      |      | 12.0  |                  | 12.0   |       |       | 12.0 |     |    |
| Parking / Grade / Parking                 | N           | 0         | N    | N    | 0     | N                | N  | 0     | N     | N    | N   |    |
| Parking maneuvers, N <sub>m</sub>         |             |           |      |      |       |                  |  |       |       |      |     |    |
| Buses stopping, N <sub>B</sub>            |             | 0         |      |      | 0     |                  | 0  |       | 0     |      |     |    |
| Min. time for pedestrians, G <sub>p</sub> |             | 3.2       |      |      |       |                  |  | 3.2   |       |      | 3.2 |    |
| Phasing                                   | WB Only     | Thru & RT | 03   | 04   |       | NB Only          | 06   |       | 07    |      | 08  |    |
| Timing                                    | G = 35.0    | G = 50.0  | G =  | G =  |       | G = 20.0         | G =  |       | G =   |      | G = |    |

|                                   |               |         |         |             |         |         |                         |
|-----------------------------------|---------------|---------|---------|-------------|---------|---------|-------------------------|
| $  Y = 5.5  $                     | $  Y = 5.5  $ | $  Y =$ | $  Y =$ | $  Y = 5  $ | $  Y =$ | $  Y =$ | $  Y =$                 |
| Duration of Analysis, T =<br>1.00 |               |         |         |             |         |         | Cycle Length, C = 121.0 |

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB   |       |    | WB           |       |    | NB               |    |       | SB |    |    |
|-------------------------------------|------|-------|----|--------------|-------|----|------------------|----|-------|----|----|----|
|                                     | LT   | TH    | RT | LT           | TH    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |      | 360   |    |              | 455   |    | 63               |    | 32    |    |    |    |
| Lane group capacity, c              |      | 621   |    |              | 1172  |    | 262              |    | 703   |    |    |    |
| v/c ratio, X                        |      | 0.58  |    |              | 0.39  |    | 0.24             |    | 0.05  |    |    |    |
| Total green ratio, g/C              |      | 0.41  |    |              | 0.75  |    | 0.17             |    | 0.50  |    |    |    |
| Uniform delay, d <sub>1</sub>       |      | 27.4  |    |              | 5.4   |    | 43.9             |    | 15.7  |    |    |    |
| Progression factor, PF              |      | 1.000 |    |              | 1.000 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |      | 0.50  |    |              | 0.50  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |      | 4.0   |    |              | 1.0   |    | 2.2              |    | 0.1   |    |    |    |
| Initial queue delay, d <sub>3</sub> |      |       |    |              |       |    |                  |    |       |    |    |    |
| Control delay                       |      | 31.4  |    |              | 6.4   |    | 46.1             |    | 15.9  |    |    |    |
| Lane group LOS                      |      | C     |    |              | A     |    | D                |    | B     |    |    |    |
| Approach delay                      | 31.4 |       |    | 6.4          |       |    | 35.9             |    |       |    |    |    |
| Approach LOS                        | C    |       |    | A            |       |    | D                |    |       |    |    |    |
| Intersection delay                  | 19.4 |       |    | $X_c = 0.36$ |       |    | Intersection LOS |    |       | B  |    |    |

## HCS2000™ DETAILED REPORT

| General Information                  |  |  |  |  |  | Site Information  |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|---|--|--|--|--|--|
| Analyst trung duong<br>Agency or Co. |  |  |  |  |  | Intersection Ven 118 & Bypass St<br>Area Type All other areas |  |  |  |  |  |
| Date 3/24/09<br>Performed            |  |  |  |  |  | Jurisdiction Analysis Year 2008 (current)<br>Ven 118 & Ven    |  |  |  |  |  |
| Time Period A.M. Peak                |  |  |  |  |  | Project ID 34/Donlon Improv-<br>Bypass-East Intersect         |  |  |  |  |  |

## Volume and Timing Input

|   | EB       |          |       | WB                     |    |    | NB       |       |       | SB  |    |    |
|---|----------|----------|-------|------------------------|----|----|----------|-------|-------|-----|----|----|
|   | LT       | TH       | RT    | LT                     | TH | RT | LT       | TH    | RT    | LT  | TH | RT |
| Number of lanes, N                        | 0        | 1        | 1     | 2                      | 1  | 0  | 1        | 0     | 1     | 0   | 0  | 0  |
| Lane group                                |          | T        | R     | L                      | T  |    | L        |       | R     |     |    |    |
| Volume, V (vph)                           | 306      | 0        | 405   | 350                    |    |    | 0        |       | 452   |     |    |    |
| % Heavy vehicles, %HV                     | 26       | 26       | 20    | 20                     |    |    | 14       |       | 14    |     |    |    |
| Peak-hour factor, PHF                     | 1.00     | 1.00     | 1.00  | 1.00                   |    |    | 1.00     |       | 1.00  |     |    |    |
| Pretimed (P) or actuated (A)              | P        | P        | P     | P                      |    |    | P        |       | P     |     |    |    |
| Start-up lost time, l <sub>1</sub>        | 2.0      | 2.0      | 2.0   | 2.0                    |    |    | 2.0      |       | 2.0   |     |    |    |
| Extension of effective green, e           | 2.0      | 2.0      | 2.0   | 2.0                    |    |    | 2.0      |       | 2.0   |     |    |    |
| Arrival type, AT                          | 3        | 3        | 3     | 3                      |    |    | 3        |       | 3     |     |    |    |
| Unit extension, UE                        | 3.0      | 3.0      | 3.0   | 3.0                    |    |    | 3.0      |       | 3.0   |     |    |    |
| Filtering/metering, I                     | 1.000    | 1.000    | 1.000 | 1.000                  |    |    | 1.000    | 1.000 | 1.000 |     |    |    |
| Initial unmet demand, Q <sub>b</sub>      | 0.0      | 0.0      | 0.0   | 0.0                    |    |    | 0.0      |       | 0.0   |     |    |    |
| Ped / Bike / RTOR volumes                 | 1        | 0        |       |                        |    |    | 0        |       | 0     | 0   |    |    |
| Lane width                                | 12.0     | 12.0     | 12.0  | 12.0                   |    |    | 12.0     |       | 12.0  |     |    |    |
| Parking / Grade / Parking                 | N        | 0        | N     | N                      | 0  | N  | N        | 0     | N     | N   |    | N  |
| Parking maneuvers, N <sub>m</sub>         |          |          |       |                        |    |    |          |       |       |     |    |    |
| Buses stopping, N <sub>B</sub>            | 0        | 0        | 0     | 0                      |    |    | 0        |       | 0     |     |    |    |
| Min. time for pedestrians, G <sub>p</sub> |          | 3.2      |       |                        |    |    | 3.2      |       | 3.2   |     |    |    |
| Phasing                                   | WB Only  | EB Only  | 03    | 04                     |    |    | NB Only  | 06    | 07    | 08  |    |    |
| Timing                                    | G = 40.0 | G = 25.0 | G =   | G =                    |    |    | G = 18.0 | G =   | G =   | G = |    |    |
|   | Y = 5.5  | Y = 5.5  | Y =   | Y =                    |    |    | Y = 5    | Y =   | Y =   | Y = |    |    |
| Duration of Analysis, T =                 |          |          |       | Cycle Length, C = 99.0 |    |    |          |       |       |     |    |    |

1.00

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB |       |       | WB           |       |    | NB               |    |       | SB |    |    |
|-------------------------------------|----|-------|-------|--------------|-------|----|------------------|----|-------|----|----|----|
|                                     | LT | TH    | RT    | LT           | TH    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |    | 306   | 0     | 405          | 350   |    | 0                |    | 452   |    |    |    |
| Lane group capacity, c              |    | 381   | 324   | 1179         | 640   |    | 288              |    | 902   |    |    |    |
| v/c ratio, X                        |    | 0.80  | 0.00  | 0.34         | 0.55  |    | 0.00             |    | 0.50  |    |    |    |
| Total green ratio, g/C              |    | 0.25  | 0.25  | 0.40         | 0.40  |    | 0.18             |    | 0.64  |    |    |    |
| Uniform delay, d <sub>1</sub>       |    | 34.7  | 27.7  | 20.4         | 22.6  |    | 33.1             |    | 9.6   |    |    |    |
| Progression factor, PF              |    | 1.000 | 1.000 | 1.000        | 1.000 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |    | 0.50  | 0.50  | 0.50         | 0.50  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |    | 18.3  | 0.0   | 0.8          | 3.4   |    | 0.0              |    | 2.0   |    |    |    |
| Initial queue delay, d <sub>3</sub> |    |       |       |              |       |    |                  |    |       |    |    |    |
| Control delay                       |    | 53.0  | 27.7  | 21.2         | 25.9  |    | 33.1             |    | 11.6  |    |    |    |
| Lane group LOS                      |    | D     | C     | C            | C     |    | C                |    | B     |    |    |    |
| Approach delay                      |    | 53.0  |       | 23.4         |       |    | 11.6             |    |       |    |    |    |
| Approach LOS                        |    | D     |       | C            |       |    | B                |    |       |    |    |    |
| Intersection delay                  |    | 25.9  |       | $X_c = 0.59$ |       |    | Intersection LOS |    |       |    |    | C  |

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## HCS2000™ DETAILED REPORT

| General Information             |  |  |  |  |  | Site Information                                      |  |  |  |  |  |
|---------------------------------|--|--|--|--|--|---|--|--|--|--|--|
| Analyst trung duong             |  |  |  |  |  | Intersection Ven 34 (Somis Rd)& Bypass St             |  |  |  |  |  |
| Agency or Co. Ventura           |  |  |  |  |  | Area Type All other areas                             |  |  |  |  |  |
| Date 3/24/09                    |  |  |  |  |  | Jurisdiction Analysis Year 2008 (current)             |  |  |  |  |  |
| Performed Time Period A.M. Peak |  |  |  |  |  | Ven 118 & Ven 34/Donlon Improv-Bypass-South Intersect |  |  |  |  |  |

## Volume and Timing Input

|   | EB       |     |     | WB    |          |       | NB  |       |       | SB   |       |    |
|---|----------|-----|-----|-------|----------|-------|-----|-------|-------|------|-------|----|
|   | LT       | TH  | RT  | LT    | TH       | RT    | LT  | TH    | RT    | LT   | TH    | RT |
| Number of lanes, N <sub>1</sub>           | 0        | 0   | 0   | 1     | 0        | 1     | 0   | 1     | 1     | 0    | 1     | 0  |
| Lane group                                |          |     |     | L     |          | R     |     | T     | R     |      | LT    |    |
| Volume, V (vph)                           |          |     |     | 405   |          | 0     |     | 95    | 452   | 0    | 105   |    |
| % Heavy vehicles, %HV                     |          |     |     | 20    |          | 0     |     | 0     | 14    | 0    | 0     |    |
| Peak-hour factor, PHF                     |          |     |     | 1.00  |          | 1.00  |     | 1.00  | 1.00  | 1.00 | 1.00  |    |
| Pretimed (P) or actuated (A)              |          |     |     | P     |          | P     |     | P     | P     | A    | P     |    |
| Start-up lost time, l <sub>1</sub>        |          |     |     | 2.0   |          | 2.0   |     | 2.0   | 2.0   |      | 2.0   |    |
| Extension of effective green, e           |          |     |     | 2.0   |          | 2.0   |     | 2.0   | 2.0   |      | 2.0   |    |
| Arrival type, AT                          |          |     |     | 3     |          | 3     |     | 3     | 3     |      | 3     |    |
| Unit extension, UE                        |          |     |     | 3.0   |          | 3.0   |     | 3.0   | 3.0   |      | 3.0   |    |
| Filtering/metering, I                     |          |     |     | 1.000 | 1.000    | 1.000 |     | 1.000 | 1.000 |      | 1.000 |    |
| Initial unmet demand, Q <sub>b</sub>      |          |     |     | 0.0   |          | 0.0   |     | 0.0   | 0.0   |      | 0.0   |    |
| Ped / Bike / RTOR volumes                 | 1        |     |     | 0     |          | 0     |     | 0     | 0     |      |       |    |
| Lane width                                |          |     |     | 12.0  |          | 12.0  |     | 12.0  | 12.0  |      | 12.0  |    |
| Parking / Grade / Parking                 | N        |     | N   | N     | 0        | N     | N   | 0     | N     | N    | 0     | N  |
| Parking maneuvers, N <sub>m</sub>         |          |     |     |       |          |       |     |       |       |      |       |    |
| Buses stopping, N <sub>B</sub>            |          |     |     | 0     |          | 0     |     | 0     | 0     |      | 0     |    |
| Min. time for pedestrians, G <sub>p</sub> |          | 3.2 |     |       | 3.2      |       |     | 3.2   |       |      |       |    |
| Phasing                                   | WB Only  | 02  | 03  | 04    | NS Perm  |       | 06  | 07    | 08    |      |       |    |
| Timing                                    | G = 55.0 | G = | G = | G =   | G = 50.0 |       | G = | G =   | G =   |      |       |    |
|   | Y = 5.5  | Y = | Y = | Y =   | Y = 5    |       | Y = | Y =   | Y =   |      |       |    |

Duration of Analysis, T =  
1.00

Cycle Length, C = 115.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB   |    |    | WB                    |    |       | NB |                  |       | SB |       |    |
|-------------------------------------|------|----|----|-----------------------|----|-------|----|------------------|-------|----|-------|----|
|                                     | LT   | TH | RT | LT                    | TH | RT    | LT | TH               | RT    | LT | TH    | RT |
| Adjusted flow rate, v               |      |    |    | 405                   |    | 0     |    | 95               | 452   |    | 105   |    |
| Lane group capacity, c              |      |    |    | 716                   |    | 769   |    | 823              | 1417  |    | 823   |    |
| v/c ratio, X                        |      |    |    | 0.57                  |    | 0.00  |    | 0.12             | 0.32  |    | 0.13  |    |
| Total green ratio, g/C              |      |    |    | 0.48                  |    | 0.48  |    | 0.43             | 1.00  |    | 0.43  |    |
| Uniform delay, d <sub>1</sub>       |      |    |    | 21.7                  |    | 15.8  |    | 19.5             | 0.0   |    | 19.7  |    |
| Progression factor, PF              |      |    |    | 1.000                 |    | 1.000 |    | 1.000            | 0.950 |    | 1.000 |    |
| Delay calibration, k                |      |    |    | 0.50                  |    | 0.50  |    | 0.50             | 0.50  |    | 0.50  |    |
| Incremental delay, d <sub>2</sub>   |      |    |    | 3.3                   |    | 0.0   |    | 0.3              | 0.6   |    | 0.3   |    |
| Initial queue delay, d <sub>3</sub> |      |    |    |                       |    |       |    |                  |       |    |       |    |
| Control delay                       |      |    |    | 24.9                  |    | 15.8  |    | 19.8             | 0.6   |    | 20.0  |    |
| Lane group LOS                      |      |    |    | C                     |    | B     |    | B                | A     |    | B     |    |
| Approach delay                      |      |    |    | 24.9                  |    |       |    | 3.9              |       |    | 20.0  |    |
| Approach LOS                        |      |    |    | C                     |    |       |    | A                |       |    | B     |    |
| Intersection delay                  | 13.6 |    |    | X <sub>c</sub> = 0.36 |    |       |    | Intersection LOS |       |    | B     |    |

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**HCS2000™ DETAILED REPORT**

| General Information                  |  |  |  |  |  | Site Information  |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|---|--|--|--|--|--|
| Analyst trung duong                  |  |  |  |  |  | Intersection Ven 118 & Ven 34/Donlon Rd                   |  |  |  |  |  |
| Agency or Co.                        |  |  |  |  |  | Area Type All other areas                                 |  |  |  |  |  |
| Date Performed 6/9/2009              |  |  |  |  |  | Jurisdiction  |  |  |  |  |  |
| Time Period A.M. Peak - 9/30/08 Data |  |  |  |  |  | Analysis Year Current (2008)                              |  |  |  |  |  |
|                                      |  |  |  |  |  | Project ID Ven 118 & Ven 34/Donlon Inter. Impr-Bridge Alt |  |  |  |  |  |

**Volume and Timing Input**

|   | EB    |       |       | WB    |       |      | NB   |       |       | SB   |       |      |
|---|-------|-------|-------|-------|-------|------|------|-------|-------|------|-------|------|
|   | LT    | TH    | RT    | LT    | TH    | RT   | LT   | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>l</sub>           | 1     | 1     | 1     | 2     | 1     | 0    | 0    | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L     | T     | R     | L     | TR    |      |      | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 46    | 306   | 8     | 405   | 345   | 5    | 63   | 32    | 452   | 8    | 97    | 13   |
| % Heavy vehicles, %HV                     | 26    | 26    | 26    | 20    | 20    | 20   | 14   | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P     | P     | P     | P     | P     | P    | P    | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>1</sub>        | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3     | 3     | 3     | 3     | 3     |      |      | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |      |      | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, I                     | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |      |      | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 0     |       | 0     | 0     |       |      | 0    | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0  | 12.0  | 12.0  | 12.0  | 12.0  |      |      | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N     | 0     | N     | N     | 0     | N    | N    | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |       |       |       |       |       |      |      |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0     | 0     | 0     | 0     | 0     |      |      | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |       | 3.2   |       |       | 3.2   |      |      | 3.2   |       |      | 3.2   |      |

| Phasing | Excl. Left | Thru & RT | 03  | 04  | NS Perm  | 06  | 07  | 08  |
|---------|------------|-----------|-----|-----|----------|-----|-----|-----|
| Timing  | G = 25.0   | G = 35.0  | G = | G = | G = 23.0 | G = | G = | G = |
|         | Y = 5.5    | Y = 5.5   | Y = | Y = | Y = 4.5  | Y = | Y = | Y = |

Duration of Analysis, T =  
1.00

Cycle Length, C = 98.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|-------------------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                                     | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v               | 46    | 306   | 8     | 405          | 350   |    |                  | 95    | 452   |      | 118   |    |
| Lane group capacity, c              | 364   | 536   | 456   | 741          | 561   |    |                  | 302   | 755   |      | 430   |    |
| v/c ratio, X                        | 0.13  | 0.57  | 0.02  | 0.55         | 0.62  |    |                  | 0.31  | 0.60  |      | 0.27  |    |
| Total green ratio, g/C              | 0.25  | 0.36  | 0.36  | 0.25         | 0.36  |    |                  | 0.23  | 0.53  |      | 0.23  |    |
| Uniform delay, d <sub>1</sub>       | 28.3  | 25.7  | 20.6  | 31.8         | 26.3  |    |                  | 31.2  | 15.8  |      | 30.9  |    |
| Progression factor, PF              | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k                | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, d <sub>2</sub>   | 0.7   | 4.4   | 0.1   | 2.9          | 5.3   |    |                  | 2.7   | 3.5   |      | 1.6   |    |
| Initial queue delay, d <sub>3</sub> |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay                       | 29.0  | 30.1  | 20.7  | 34.8         | 31.6  |    |                  | 34.0  | 19.3  |      | 32.5  |    |
| Lane group LOS                      | C     | C     | C     | C            | C     |    |                  | C     | B     |      | C     |    |
| Approach delay                      | 29.8  |       |       | 33.3         |       |    | 21.9             |       |       | 32.5 |       |    |
| Approach LOS                        | C     |       |       | C            |       |    | C                |       |       | C    |       |    |
| Intersection delay                  | 29.0  |       |       | $X_c = 0.61$ |       |    | Intersection LOS |       |       | C    |       |    |

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## HCS2000™ DETAILED REPORT

| General Information |                          |  |  |  |  | Site Information |  |  |  |  |  |
|---------------------|--------------------------|--|--|--|--|------------------|--|--|--|--|--|
| Analyst             |                          |  |  |  |  | Intersection     | Ven 118 (L.A. Ave.) & Ven 34                             |  |  |  |  |
| Agency or Co.       | Ventura                  |  |  |  |  | Area Type        | All other areas  |  |  |  |  |
| Date Performed      | 4/20/2009                |  |  |  |  | Jurisdiction     |  |  |  |  |  |
| Time Period         | P.M. Peak - 9/30/08 Data |  |  |  |  | Analysis Year    | Current (2008)   |  |  |  |  |
|                     |                          |  |  |  |  | Project ID       | Ven 118 & Ven 34/Donlon Inter. Improvement - Exist. Cond |  |  |  |  |

## Volume and Timing Input

|   | EB        |          |      | WB   |          |     | NB    |       |       | SB |    |    |
|---|-----------|----------|------|------|----------|-----|-------|-------|-------|----|----|----|
|   | LT        | TH       | RT   | LT   | TH       | RT  | LT    | TH    | RT    | LT | TH | RT |
| Number of lanes, N <sub>l</sub>           | 0         | 1        | 0    | 0    | 1        | 0   | 1     | 0     | 1     | 0  | 0  | 0  |
| Lane group                                |           | TR       |      |      | LT       |     | L     |       | R     |    |    |    |
| Volume, V (vph)                           | 345       | 12       | 409  | 464  |          |     | 98    |       | 529   |    |    |    |
| % Heavy vehicles, %HV                     | 26        | 26       | 20   | 20   |          |     | 14    |       | 14    |    |    |    |
| Peak-hour factor, PHF                     | 1.00      | 1.00     | 1.00 | 1.00 |          |     | 1.00  |       | 1.00  |    |    |    |
| Pretimed (P) or actuated (A)              |           | P        | P    | P    | P        |     | P     |       | P     |    |    |    |
| Start-up lost time, l <sub>1</sub>        | 2.0       |          |      | 2.0  |          |     | 2.0   |       | 2.0   |    |    |    |
| Extension of effective green, e           |           | 2.0      |      |      | 2.0      |     | 2.0   |       | 2.0   |    |    |    |
| Arrival type, AT                          |           | 3        |      |      | 3        |     | 3     |       | 3     |    |    |    |
| Unit extension, UE                        |           | 3.0      |      |      | 3.0      |     | 3.0   |       | 3.0   |    |    |    |
| Filtering/metering, I                     |           | 1.000    |      |      | 1.000    |     | 1.000 | 1.000 | 1.000 |    |    |    |
| Initial unmet demand, Q <sub>b</sub>      |           | 0.0      |      |      | 0.0      |     | 0.0   |       | 0.0   |    |    |    |
| Ped / Bike / RTOR volumes                 | 1         |          | 0    |      |          |     | 0     |       | 0     | 0  | 0  |    |
| Lane width                                |           | 12.0     |      |      | 12.0     |     | 12.0  |       | 12.0  |    |    |    |
| Parking / Grade / Parking                 | N         | 0        | N    | N    | 0        | N   | N     | 0     | N     | N  | N  |    |
| Parking maneuvers, N <sub>m</sub>         |           |          |      |      |          |     |       |       |       |    |    |    |
| Buses stopping, N <sub>B</sub>            |           | 0        |      |      | 0        |     | 0     |       | 0     |    |    |    |
| Min. time for pedestrians, G <sub>p</sub> |           | 3.2      |      |      |          |     | 3.2   |       | 3.2   |    |    |    |
| Phasing                                   | WB Only   | EB Only  | 03   | 04   | NB Only  | 06  | 07    | 08    |       |    |    |    |
| Timing                                    | G = 110.0 | G = 75.0 | G =  | G =  | G = 20.0 | G = | G =   | G =   |       |    |    |    |
|   | Y = 6.5   | Y = 6.5  | Y =  | Y =  | Y = 5.5  | Y = | Y =   | Y =   |       |    |    |    |

Duration of Analysis, T =  
1.00

Cycle Length, C = 223.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB |       |    | WB |                       |    | NB               |    |       | SB |    |    |
|-------------------------------------|----|-------|----|----|-----------------------|----|------------------|----|-------|----|----|----|
|                                     | LT | TH    | RT | LT | TH                    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |    | 357   |    |    | 873                   |    | 98               |    | 529   |    |    |    |
| Lane group capacity, c              |    | 504   |    |    | 761                   |    | 142              |    | 859   |    |    |    |
| v/c ratio, X                        |    | 0.71  |    |    | 1.15                  |    | 0.69             |    | 0.62  |    |    |    |
| Total green ratio, g/C              |    | 0.34  |    |    | 0.49                  |    | 0.09             |    | 0.61  |    |    |    |
| Uniform delay, d <sub>1</sub>       |    | 64.7  |    |    | 56.8                  |    | 98.7             |    | 27.6  |    |    |    |
| Progression factor, PF              |    | 1.000 |    |    | 1.000                 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |    | 0.50  |    |    | 0.50                  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |    | 8.5   |    |    | 282.2                 |    | 26.9             |    | 3.3   |    |    |    |
| Initial queue delay, d <sub>3</sub> |    |       |    |    |                       |    |                  |    |       |    |    |    |
| Control delay                       |    | 73.3  |    |    | 339.0                 |    | 125.7            |    | 31.0  |    |    |    |
| Lane group LOS                      |    | E     |    |    | F                     |    | F                |    | C     |    |    |    |
| Approach delay                      |    | 73.3  |    |    | 339.0                 |    | 45.8             |    |       |    |    |    |
| Approach LOS                        |    | E     |    |    | F                     |    | D                |    |       |    |    |    |
| Intersection delay                  |    | 188.9 |    |    | X <sub>c</sub> = 0.94 |    | Intersection LOS |    | F     |    |    |    |

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Version 4.1c

## Detailed Report

## HCS2000™ DETAILED REPORT

| General Information |                             |  |  |  |  | Site Information |   |  |  |  |  |
|---------------------|-----------------------------|--|--|--|--|------------------|---|--|--|--|--|
| Analyst             | trung duong                 |  |  |  |  | Intersection     | Ven 118 & Ven<br>34/Donlon Rd                                       |  |  |  |  |
| Agency or Co.       | Ventura                     |  |  |  |  | Area Type        | All other areas   |  |  |  |  |
| Date Performed      | 4/20/2009                   |  |  |  |  | Jurisdiction     |   |  |  |  |  |
| Time Period         | P.M. Peak - 9/30/08<br>Data |  |  |  |  | Analysis Year    | Current (2008)  |  |  |  |  |
|                     |                             |  |  |  |  | Project ID       | Ven 118 & Ven<br>34/Donlon Inter.<br>Improvement - 2 WB LT<br>Lanes |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |       |      | NB       |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|-------|------|----------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH    | RT   | LT       | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>1</sub>           | 1          | 1         | 1     | 2     | 1     | 0    | 0        | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR    |      |          | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 23         | 322       | 12    | 338   | 434   | 7    | 98       | 63    | 466   | 29   | 71    | 30   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20    | 20   | 14       | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00  | 1.00 | 1.00     | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P     | P    | P        | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>1</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |      |          | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |      |          | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3     |      |          | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0   |      |          | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, l                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000 |      |          | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0   |      |          | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 0          |           | 0     | 0     |       |      | 0        | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0  |      |          | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0     | N    | N        | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |       |      |          |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0     |      |          | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2   |      |          | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    |       | 04    |      | NS Perm  | 06    |       | 07   |       | 08   |
| Timing                                    | G = 20.0   | G = 35.0  | G =   |       | G =   |      | G = 20.0 | G =   |       | G =  |       | G =  |

|                                |               |           |           |               |           |                        |           |
|--------------------------------|---------------|-----------|-----------|---------------|-----------|------------------------|-----------|
| $  Y = 5.5  $                  | $  Y = 5.5  $ | $  Y =  $ | $  Y =  $ | $  Y = 4.5  $ | $  Y =  $ | $  Y =  $              | $  Y =  $ |
| Duration of Analysis, T = 1.00 |               |           |           |               |           | Cycle Length, C = 90.5 |           |

**Lane Group Capacity, Control Delay, and LOS Determination**

|                            | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|----------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                            | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v      | 23    | 322   | 12    | 338          | 441   |    |                  | 161   | 466   |      | 130   |    |
| Lane group capacity, c     | 317   | 583   | 496   | 645          | 611   |    |                  | 261   | 697   |      | 350   |    |
| v/c ratio, X               | 0.07  | 0.55  | 0.02  | 0.52         | 0.72  |    |                  | 0.62  | 0.67  |      | 0.37  |    |
| Total green ratio, g/C     | 0.22  | 0.39  | 0.39  | 0.22         | 0.39  |    |                  | 0.22  | 0.49  |      | 0.22  |    |
| Uniform delay, $d_1$       | 27.9  | 21.6  | 17.2  | 31.1         | 23.6  |    |                  | 31.8  | 17.4  |      | 29.9  |    |
| Progression factor, PF     | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k       | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, $d_2$   | 0.4   | 3.8   | 0.1   | 3.1          | 7.5   |    |                  | 10.9  | 5.2   |      | 3.0   |    |
| Initial queue delay, $d_3$ |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay              | 28.4  | 25.4  | 17.3  | 34.1         | 31.1  |    |                  | 42.7  | 22.6  |      | 32.9  |    |
| Lane group LOS             | C     | C     | B     | C            | C     |    |                  | D     | C     |      | C     |    |
| Approach delay             | 25.3  |       |       | 32.4         |       |    | 27.8             |       |       | 32.9 |       |    |
| Approach LOS               | C     |       |       | C            |       |    | C                |       |       | C    |       |    |
| Intersection delay         | 29.6  |       |       | $X_C = 0.69$ |       |    | Intersection LOS |       |       | C    |       |    |

## HCS2000™ DETAILED REPORT

| General Information |  |  |  |  |  | Site Information  |  |  |  |  |  |
|---------------------|--|--|--|--|--|---|--|--|--|--|--|
| Analyst             |  |  |  |  |  | Intersection Ven 118 & Ven 34/Donlon Rd                                 |  |  |  |  |  |
| Agency or Co.       |  |  |  |  |  | Area Type All other areas   |  |  |  |  |  |
| Date Performed      |  |  |  |  |  | Jurisdiction Current (2008)   |  |  |  |  |  |
| Time Period         |  |  |  |  |  | Analysis Year Ven 118 & Ven 34/Donlon Inter. Improvement - 1 WB LT Lane |  |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |          |      | NB   |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|----------|------|------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH       | RT   | LT   | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>l</sub>           | 1          | 1         | 1     | 1     | 1        | 0    | 0    | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR       |      |      | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 23         | 322       | 12    | 338   | 434      | 7    | 98   | 63    | 466   | 29   | 71    | 30   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20       | 20   | 14   | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00     | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P        | P    | P    | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>1</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3        |      |      | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0      |      |      | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, l                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000    |      |      | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0      |      |      | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 1          |           | 0     | 0     |          |      | 0    | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0     |      |      | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0        | N    | N    | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |          |      |      |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0        |      |      | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2      |      |      | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    | 04    | NS Perm  | 06   | 07   | 08    |       |      |       |      |
| Timing                                    | G = 25.0   | G = 30.0  | G =   | G =   | G = 20.0 | G =  | G =  | G =   |       |      |       |      |

## Detailed Report

|                                |               |                        |           |               |           |           |           |
|--------------------------------|---------------|------------------------|-----------|---------------|-----------|-----------|-----------|
| $  Y = 5.5  $                  | $  Y = 5.5  $ | $  Y =  $              | $  Y =  $ | $  Y = 4.5  $ | $  Y =  $ | $  Y =  $ | $  Y =  $ |
| Duration of Analysis, T = 1.00 |               | Cycle Length, C = 90.5 |           |               |           |           |           |

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|-------------------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                                     | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v               | 23    | 322   | 12    | 338          | 441   |    |                  | 161   | 466   |      | 130   |    |
| Lane group capacity, c              | 396   | 500   | 425   | 415          | 524   |    |                  | 261   | 775   |      | 350   |    |
| v/c ratio, X                        | 0.06  | 0.64  | 0.03  | 0.81         | 0.84  |    |                  | 0.62  | 0.60  |      | 0.37  |    |
| Total green ratio, g/C              | 0.28  | 0.33  | 0.33  | 0.28         | 0.33  |    |                  | 0.22  | 0.55  |      | 0.22  |    |
| Uniform delay, d <sub>1</sub>       | 24.1  | 25.7  | 20.4  | 30.6         | 28.0  |    |                  | 31.8  | 13.8  |      | 29.9  |    |
| Progression factor, PF              | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k                | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, d <sub>2</sub>   | 0.3   | 6.4   | 0.1   | 18.1         | 17.2  |    |                  | 10.9  | 3.5   |      | 3.0   |    |
| Initial queue delay, d <sub>3</sub> |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay                       | 24.4  | 32.2  | 20.5  | 48.6         | 45.3  |    |                  | 42.7  | 17.3  |      | 32.9  |    |
| Lane group LOS                      | C     | C     | C     | D            | D     |    |                  | D     | B     |      | C     |    |
| Approach delay                      | 31.3  |       |       | 46.7         |       |    | 23.8             |       |       | 32.9 |       |    |
| Approach LOS                        | C     |       |       | D            |       |    | C                |       |       | C    |       |    |
| Intersection delay                  | 35.3  |       |       | $X_c = 0.77$ |       |    | Intersection LOS |       |       | D    |       |    |

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# ROUNDABOUTS - UNSIGNALIZED INTERSECTIONS WORKSHEET

| General Information          |                     | Site Information                                 |                      |      |  |  |
|------------------------------|---------------------|--|----------------------|------|--|--|
| Analyst                      | trung duong         | Intersection                                     | Ven 118/34/Donlon Rd |      |  |  |
| Agency/Co.                   | Ventura             | Jurisdiction                                     |                      |      |  |  |
| Date Performed               | 10/30/2008          | Analysis Year                                    | Current (2008)       |      |  |  |
| Time Period                  | PM Peak - 9/30/2008 |  |                      |      |  |  |
| Project Description          |                     | Ven 118 & Ven 34/Donlon Intersection Improvement |                      |      |  |  |
| Volume Adjustments           |                     |  |                      |      |  |  |
|                              |                     | EB   | WB                   | NB   |  |  |
| -T Traffic                   | Volume, veh/h       | 23   | 338                  | 98   |  |  |
|                              | PHF                 | 1.00   | 1.00                 | 1.00 |  |  |
|                              | Flow rate, veh/h    | 23   | 338                  | 98   |  |  |
| TH Traffic                   | Volume, veh/h       | 322  | 434                  | 63   |  |  |
|                              | PHF                 | 1.00   | 1.00                 | 1.00 |  |  |
|                              | Flow rate, veh/h    | 322  | 434                  | 63   |  |  |
| RT Traffic                   | Volume, veh/h       | 12   | 7                    | 466  |  |  |
|                              | PHF                 | 1.00   | 1.00                 | 1.00 |  |  |
|                              | Flow rate, veh/h    | 12   | 7                    | 466  |  |  |
| Approach Flow Computation    |                     |  |                      |      |  |  |
| Approach Flow (veh/h)        |                     | Va (veh/h)                                       |                      |      |  |  |
| Vae                          |                     | 357  |                      |      |  |  |
| Vaw                          |                     | 779  |                      |      |  |  |
| Van                          |                     | 627  |                      |      |  |  |
| Vas                          |                     | 130  |                      |      |  |  |
| Circulating Flow Computation |                     |  |                      |      |  |  |
| Approach Flow (veh/h)        |                     | Vc (veh/h)                                       |                      |      |  |  |
| Vce                          |                     | 438  |                      |      |  |  |
| Vcw                          |                     | 184  |                      |      |  |  |
| Vcn                          |                     | 374  |                      |      |  |  |
| Vcs                          |                     | 870  |                      |      |  |  |
| Capacity Computation         |                     |  |                      |      |  |  |
|                              |                     | EB   | WB                   | NB   |  |  |
| Capacity                     | Upper bound         | 980  | 1199                 | 1031 |  |  |
|                              | Lower bound         | 796  | 992                  | 842  |  |  |
| v/c Ratio                    | Upper bound         | 0.36   | 0.65                 | 0.61 |  |  |
|                              | Lower bound         | 0.45   | 0.79                 | 0.74 |  |  |

## HCS2000™ DETAILED REPORT

| General Information                       |                          |          |      |       |      | Site Information |  |       |       |     |     |
|---|--------------------------|----------|------|-------|------|------------------|--|-------|-------|-----|-----|
| Analyst                                   | trung duong              |          |      |       |      | Intersection     | Ven 118 (L.A. Ave.) & Ven 34                               |       |       |     |     |
| Agency or Co.                             | Ventura                  |          |      |       |      | Area Type        | All other areas  |       |       |     |     |
| Date Performed                            | 3/26/2009                |          |      |       |      | Jurisdiction     | Analysis Year Current (2008)                               |       |       |     |     |
| Time Period                               | P.M. Peak - 9/30/08 Data |          |      |       |      | Project ID       | Ven 118 & Ven 34/Donlon Improv - Bypass - Exist. Intersect |       |       |     |     |
| Volume and Timing Input                   |                          |          |      |       |      |                  |  |       |       |     |     |
|   |                          |          | EB   |       |      | WB               |  |       | NB    |     |     |
|   |                          |          | LT   | TH    | RT   | LT               | TH   | RT    | LT    | TH  | RT  |
| Number of lanes, N <sub>l</sub>           | 0                        | 1        | 0    | 0     | 1    | 0                | 1  | 0     | 1     | 0   | 0   |
| Lane group                                | TR                       |          |      | LT    |      |                  | L  |       |       | R   |     |
| Volume, V (vph)                           | 345                      | 12       | 71   | 464   |      |                  | 98   |       | 63    |     |     |
| % Heavy vehicles, %HV                     | 26                       | 26       | 20   | 20    |      |                  | 14   |       | 14    |     |     |
| Peak-hour factor, PHF                     | 1.00                     | 1.00     | 1.00 | 1.00  |      |                  | 1.00   |       | 1.00  |     |     |
| Pretimed (P) or actuated (A)              |                          | P        | P    | P     | P    |                  | P  |       | P     |     |     |
| Start-up lost time, l <sub>1</sub>        | 2.0                      |          |      | 2.0   |      | 2.0              |  |       | 2.0   |     |     |
| Extension of effective green, e           |                          | 2.0      |      |       | 2.0  |                  | 2.0  |       | 2.0   |     |     |
| Arrival type, AT                          |                          | 3        |      |       | 3    |                  | 3  |       | 3     |     |     |
| Unit extension, UE                        | 3.0                      |          |      | 3.0   |      | 3.0              |  | 3.0   |       | 3.0 |     |
| Filtering/metering, I                     | 1.000                    |          |      | 1.000 |      | 1.000            | 1.000  | 1.000 | 1.000 |     |     |
| Initial unmet demand, Q <sub>b</sub>      | 0.0                      |          |      | 0.0   |      | 0.0              |  | 0.0   |       | 0.0 |     |
| Ped / Bike / RTOR volumes                 | 1                        |          | 0    |       |      |                  | 0  |       | 0     | 0   |     |
| Lane width                                |                          | 12.0     |      |       | 12.0 |                  | 12.0   |       | 12.0  |     |     |
| Parking / Grade / Parking                 | N                        | 0        | N    | N     | 0    | N                | N  | 0     | N     | N   | N   |
| Parking maneuvers, N <sub>m</sub>         |                          |          |      |       |      |                  |  |       |       |     |     |
| Buses stopping, N <sub>B</sub>            |                          | 0        |      |       | 0    |                  | 0  |       | 0     |     |     |
| Min. time for pedestrians, G <sub>p</sub> |                          | 3.2      |      |       |      |                  | 3.2  |       | 3.2   |     | 3.2 |
| Phasing                                   | WB Only                  | EB Only  | 03   | 04    |      | NB Only          | 06   | 07    | 08    |     |     |
| Timing                                    | G = 40.0                 | G = 30.0 | G =  | G =   |      | G = 10.0         | G =  | G =   | G =   |     |     |
|   | Y = 6                    | Y = 6    | Y =  | Y =   |      | Y = 5.5          | Y =  | Y =   | Y =   |     |     |

Duration of Analysis, T =  
1.00

Cycle Length, C = 97.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB |       |    | WB |                       |    | NB               |    |       | SB |    |    |
|-------------------------------------|----|-------|----|----|-----------------------|----|------------------|----|-------|----|----|----|
|                                     | LT | TH    | RT | LT | TH                    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |    | 357   |    |    | 535                   |    | 98               |    | 63    |    |    |    |
| Lane group capacity, c              |    | 462   |    |    | 645                   |    | 162              |    | 807   |    |    |    |
| v/c ratio, X                        |    | 0.77  |    |    | 0.83                  |    | 0.60             |    | 0.08  |    |    |    |
| Total green ratio, g/C              |    | 0.31  |    |    | 0.41                  |    | 0.10             |    | 0.57  |    |    |    |
| Uniform delay, d <sub>1</sub>       |    | 30.7  |    |    | 25.7                  |    | 41.9             |    | 9.5   |    |    |    |
| Progression factor, PF              |    | 1.000 |    |    | 1.000                 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |    | 0.50  |    |    | 0.50                  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |    | 12.8  |    |    | 13.0                  |    | 16.6             |    | 0.2   |    |    |    |
| Initial queue delay, d <sub>3</sub> |    |       |    |    |                       |    |                  |    |       |    |    |    |
| Control delay                       |    | 43.5  |    |    | 38.7                  |    | 58.5             |    | 9.7   |    |    |    |
| Lane group LOS                      |    | D     |    |    | D                     |    | E                |    | A     |    |    |    |
| Approach delay                      |    | 43.5  |    |    | 38.7                  |    | 39.4             |    |       |    |    |    |
| Approach LOS                        |    | D     |    |    | D                     |    | D                |    |       |    |    |    |
| Intersection delay                  |    | 40.4  |    |    | X <sub>C</sub> = 0.78 |    | Intersection LOS |    | D     |    |    |    |

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## HCS2000™ DETAILED REPORT

| General Information   |  |  |  |  |  | Site Information                       |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|
| Analyst trung duong   |  |  |  |  |  | Intersection Ven 118 & Bypass St       |  |  |  |  |  |
| Agency or Co.         |  |  |  |  |  | Area Type All other areas              |  |  |  |  |  |
| Date 3/18/09          |  |  |  |  |  | Jurisdiction                           |  |  |  |  |  |
| Performed             |  |  |  |  |  | Analysis Year 2008 (Current)           |  |  |  |  |  |
| Time Period P.M. Peak |  |  |  |  |  | Project ID                             |  |  |  |  |  |
|                       |  |  |  |  |  | 34/Donlon Improv-Bypass-East Intersect |  |  |  |  |  |

## Volume and Timing Input

|   | EB       |          |       | WB    |          |     | NB    |       |       | SB |    |     |
|---|----------|----------|-------|-------|----------|-----|-------|-------|-------|----|----|-----|
|   | LT       | TH       | RT    | LT    | TH       | RT  | LT    | TH    | RT    | LT | TH | RT  |
| Number of lanes, N <sub>l</sub>           | 0        | 1        | 1     | 2     | 1        | 0   | 1     | 0     | 1     | 0  | 0  | 0   |
| Lane group                                |          | T        | R     | L     | T        |     | L     |       | R     |    |    |     |
| Volume, V (vph)                           | 322      | 0        |       | 338   | 441      |     | 0     |       | 466   |    |    |     |
| % Heavy vehicles, %HV                     | 26       | 26       | 20    | 20    |          |     | 14    |       | 14    |    |    |     |
| Peak-hour factor, PHF                     | 1.00     | 1.00     | 1.00  | 1.00  |          |     | 1.00  |       | 1.00  |    |    |     |
| Pretimed (P) or actuated (A)              | P        | P        | P     | P     |          |     | P     |       | P     |    |    |     |
| Start-up lost time, l <sub>s</sub>        | 2.0      | 2.0      | 2.0   | 2.0   |          |     | 2.0   |       | 2.0   |    |    |     |
| Extension of effective green, e           | 2.0      | 2.0      | 2.0   | 2.0   |          |     | 2.0   |       | 2.0   |    |    |     |
| Arrival type, AT                          | 3        | 3        | 3     | 3     |          |     | 3     |       | 3     |    |    |     |
| Unit extension, UE                        | 3.0      | 3.0      | 3.0   | 3.0   |          |     | 3.0   |       | 3.0   |    |    |     |
| Filtering/metering, l                     | 1.000    | 1.000    | 1.000 | 1.000 |          |     | 1.000 | 1.000 | 1.000 |    |    |     |
| Initial unmet demand, Q <sub>b</sub>      | 0.0      | 0.0      | 0.0   | 0.0   |          |     | 0.0   |       | 0.0   |    |    |     |
| Ped / Bike / RTOR volumes                 | 1        |          | 0     |       |          |     | 0     |       | 0     | 0  |    |     |
| Lane width                                | 12.0     | 12.0     | 12.0  | 12.0  |          |     | 12.0  |       | 12.0  |    |    |     |
| Parking / Grade / Parking                 | N        | 0        | N     | N     | 0        | N   | N     | 0     | N     | N  |    | N   |
| Parking maneuvers, N <sub>m</sub>         |          |          |       |       |          |     |       |       |       |    |    |     |
| Buses stopping, N <sub>B</sub>            | 0        | 0        | 0     | 0     |          |     | 0     |       | 0     |    |    |     |
| Min. time for pedestrians, G <sub>p</sub> |          | 3.2      |       |       |          |     |       | 3.2   |       |    |    | 3.2 |
| Phasing                                   | WB Only  | EB Only  | 03    | 04    | NB Only  | 06  | 07    | 08    |       |    |    |     |
| Timing                                    | G = 38.0 | G = 25.0 | G =   | G =   | G = 18.0 | G = | G =   | G =   |       |    |    |     |
|   | Y = 6    | Y = 6    | Y =   | Y =   | Y = 5.5  | Y = | Y =   | Y =   |       |    |    |     |

Duration of Analysis, T =

Cycle Length, C = 98.5

1.00

**Lane Group Capacity, Control Delay, and LOS Determination**

|                            | EB    |       |    | WB           |       |    | NB               |    |       | SB |    |    |
|----------------------------|-------|-------|----|--------------|-------|----|------------------|----|-------|----|----|----|
|                            | LT    | TH    | RT | LT           | TH    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v      | 322   | 0     |    | 338          | 441   |    | 0                |    | 466   |    |    |    |
| Lane group capacity, c     | 383   | 325   |    | 1126         | 611   |    | 289              |    | 885   |    |    |    |
| v/c ratio, X               | 0.84  | 0.00  |    | 0.30         | 0.72  |    | 0.00             |    | 0.53  |    |    |    |
| Total green ratio, g/C     | 0.25  | 0.25  |    | 0.39         | 0.39  |    | 0.18             |    | 0.62  |    |    |    |
| Uniform delay, $d_1$       | 34.9  | 27.4  |    | 21.0         | 25.7  |    | 32.9             |    | 10.4  |    |    |    |
| Progression factor, PF     | 1.000 | 1.000 |    | 1.000        | 1.000 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k       | 0.50  | 0.50  |    | 0.50         | 0.50  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, $d_2$   | 23.0  | 0.0   |    | 0.7          | 7.5   |    | 0.0              |    | 2.3   |    |    |    |
| Initial queue delay, $d_3$ |       |       |    |              |       |    |                  |    |       |    |    |    |
| Control delay              | 57.8  | 27.4  |    | 21.7         | 33.3  |    | 32.9             |    | 12.6  |    |    |    |
| Lane group LOS             | E     | C     |    | C            | C     |    | C                |    | B     |    |    |    |
| Approach delay             | 57.8  |       |    | 28.3         |       |    | 12.6             |    |       |    |    |    |
| Approach LOS               | E     |       |    | C            |       |    | B                |    |       |    |    |    |
| Intersection delay         | 29.7  |       |    | $X_c = 0.62$ |       |    | Intersection LOS |    |       | C  |    |    |

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## HCS2000™ DETAILED REPORT

| General Information |             |  |  |  |  | Site Information |   |  |  |  |  |
|---------------------|-------------|--|--|--|--|------------------|---|--|--|--|--|
| Analyst             | trung duong |  |  |  |  | Intersection     | Ven 34 (Somis RD) & Bypass St                         |  |  |  |  |
| Agency or Co.       | Ventura     |  |  |  |  | Area Type        | All other areas                                       |  |  |  |  |
| Date Performed      | 3/20/09     |  |  |  |  | Jurisdiction     | Analysis Year 2008 (Current)                          |  |  |  |  |
| Time Period         | P.M. Peak   |  |  |  |  | Project ID       | Ven 118 & Ven 34/Donlon Improv-Bypass-South Intersect |  |  |  |  |

## Volume and Timing Input

|   | EB       |     |     | WB    |       |          | NB  |       |       | SB   |       |    |
|---|----------|-----|-----|-------|-------|----------|-----|-------|-------|------|-------|----|
|   | LT       | TH  | RT  | LT    | TH    | RT       | LT  | TH    | RT    | LT   | TH    | RT |
| Number of lanes, N <sub>1</sub>           | 0        | 0   | 0   | 1     | 0     | 1        | 0   | 1     | 1     | 0    | 1     | 0  |
| Lane group                                |          |     |     | L     |       | R        |     | T     | R     |      | LT    |    |
| Volume, V (vph)                           |          |     |     | 338   |       | 0        |     | 161   | 466   | 0    | 83    |    |
| % Heavy vehicles, %HV                     |          |     |     | 20    |       | 0        |     | 0     | 14    | 0    | 0     |    |
| Peak-hour factor, PHF                     |          |     |     | 1.00  |       | 1.00     |     | 1.00  | 1.00  | 1.00 | 1.00  |    |
| Pretimed (P) or actuated (A)              |          |     |     | P     |       | P        |     | P     | P     | A    | P     |    |
| Start-up lost time, l <sub>1</sub>        |          |     |     | 2.0   |       | 2.0      |     | 2.0   | 2.0   |      | 2.0   |    |
| Extension of effective green, e           |          |     |     | 2.0   |       | 2.0      |     | 2.0   | 2.0   |      | 2.0   |    |
| Arrival type, AT                          |          |     |     | 3     |       | 3        |     | 3     | 3     |      | 3     |    |
| Unit extension, UE                        |          |     |     | 3.0   |       | 3.0      |     | 3.0   | 3.0   |      | 3.0   |    |
| Filtering/metering, I                     |          |     |     | 1.000 | 1.000 | 1.000    |     | 1.000 | 1.000 |      | 1.000 |    |
| Initial unmet demand, Q <sub>b</sub>      |          |     |     | 0.0   |       | 0.0      |     | 0.0   | 0.0   |      | 0.0   |    |
| Ped / Bike / RTOR volumes                 | 1        |     |     | 0     |       | 0        |     | 0     |       |      |       |    |
| Lane width                                |          |     |     | 12.0  |       | 12.0     |     | 12.0  | 12.0  |      | 12.0  |    |
| Parking / Grade / Parking                 | N        |     | N   | N     | 0     | N        | N   | 0     | N     | N    | 0     | N  |
| Parking maneuvers, N <sub>m</sub>         |          |     |     |       |       |          |     |       |       |      |       |    |
| Buses stopping, N <sub>B</sub>            |          |     |     | 0     |       | 0        |     | 0     | 0     |      | 0     |    |
| Min. time for pedestrians, G <sub>p</sub> |          |     | 3.2 |       |       | 3.2      |     |       | 3.2   |      |       |    |
| Phasing                                   | WB Only  | 02  | 03  | 04    |       | NS Perm  | 06  |       | 07    |      | 08    |    |
| Timing                                    | G = 55.0 | G = | G = | G =   |       | G = 50.0 | G = |       | G =   |      | G =   |    |
|   | Y = 5.5  | Y = | Y = | Y =   |       | Y = 5    | Y = |       | Y =   |      | Y =   |    |

Duration of Analysis, T =  
1.00

Cycle Length, C = 115.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB   |    |    | WB                    |    |       | NB |                  |       | SB |       |    |
|-------------------------------------|------|----|----|-----------------------|----|-------|----|------------------|-------|----|-------|----|
|                                     | LT   | TH | RT | LT                    | TH | RT    | LT | TH               | RT    | LT | TH    | RT |
| Adjusted flow rate, v               |      |    |    | 338                   |    | 0     |    | 161              | 466   |    | 83    |    |
| Lane group capacity, c              |      |    |    | 716                   |    | 769   |    | 823              | 1417  |    | 823   |    |
| v/c ratio, X                        |      |    |    | 0.47                  |    | 0.00  |    | 0.20             | 0.33  |    | 0.10  |    |
| Total green ratio, g/C              |      |    |    | 0.48                  |    | 0.48  |    | 0.43             | 1.00  |    | 0.43  |    |
| Uniform delay, d <sub>1</sub>       |      |    |    | 20.4                  |    | 15.8  |    | 20.3             | 0.0   |    | 19.4  |    |
| Progression factor, PF              |      |    |    | 1.000                 |    | 1.000 |    | 1.000            | 0.950 |    | 1.000 |    |
| Delay calibration, k                |      |    |    | 0.50                  |    | 0.50  |    | 0.50             | 0.50  |    | 0.50  |    |
| Incremental delay, d <sub>2</sub>   |      |    |    | 2.2                   |    | 0.0   |    | 0.5              | 0.6   |    | 0.2   |    |
| Initial queue delay, d <sub>3</sub> |      |    |    |                       |    |       |    |                  |       |    |       |    |
| Control delay                       |      |    |    | 22.7                  |    | 15.8  |    | 20.8             | 0.6   |    | 19.7  |    |
| Lane group LOS                      |      |    |    | C                     |    | B     |    | C                | A     |    | B     |    |
| Approach delay                      |      |    |    | 22.7                  |    |       |    | 5.8              |       |    | 19.7  |    |
| Approach LOS                        |      |    |    | C                     |    |       |    | A                |       |    | B     |    |
| Intersection delay                  | 12.3 |    |    | X <sub>c</sub> = 0.33 |    |       |    | Intersection LOS |       |    | B     |    |

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## Detailed Report

## HCS2000™ DETAILED REPORT

| General Information |                          |  |  | Site Information |   |  |  |  |  |  |  |
|---------------------|--------------------------|--|--|------------------|---|--|--|--|--|--|--|
| Analyst             | trung duong              |  |  | Intersection     | Ven 118 & Ven 34/Donlon Rd                              |  |  |  |  |  |  |
| Agency or Co.       | Ventura                  |  |  | Area Type        | All other areas   |  |  |  |  |  |  |
| Date Performed      | 6/8/2009                 |  |  | Jurisdiction     |   |  |  |  |  |  |  |
| Time Period         | P.M. Peak - 9/30/08 Data |  |  | Analysis Year    | Current (2008)  |  |  |  |  |  |  |
|                     |                          |  |  | Project ID       | Ven 118 & Ven 34/Donlon Inter. Improvement - Bridge Alt |  |  |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |          |      | NB   |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|----------|------|------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH       | RT   | LT   | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>1</sub>           | 1          | 1         | 1     | 2     | 1        | 0    | 0    | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR       |      |      | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 23         | 322       | 12    | 338   | 434      | 7    | 98   | 63    | 466   | 29   | 71    | 30   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20       | 20   | 14   | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00     | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P        | P    | P    | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>1</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3        |      |      | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0      |      |      | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, I                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000    |      |      | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0      |      |      | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 0          |           | 0     | 0     |          |      | 0    | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0     |      |      | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0        | N    | N    | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |          |      |      |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0        |      |      | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2      |      |      | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    | 04    | NS Perm  |      | 06   | 07    | 08    |      |       |      |
| Timing                                    | G = 20.0   | G = 35.0  | G =   | G =   | G = 20.0 |      | G =  | G =   | G =   |      |       |      |

## Detailed Report

|           |           |       |       |           |       |       |       |
|-----------|-----------|-------|-------|-----------|-------|-------|-------|
| $Y = 5.5$ | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 4.5$ | $Y =$ | $Y =$ | $Y =$ |
|-----------|-----------|-------|-------|-----------|-------|-------|-------|

|                                |  |  |  |                        |  |  |  |
|--------------------------------|--|--|--|------------------------|--|--|--|
| Duration of Analysis, T = 1.00 |  |  |  | Cycle Length, C = 90.5 |  |  |  |
|--------------------------------|--|--|--|------------------------|--|--|--|

*Lane Group Capacity, Control Delay, and LOS Determination*

|                                     | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|-------------------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                                     | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v               | 23    | 322   | 12    | 338          | 441   | -  |                  | 161   | 466   |      | 130   |    |
| Lane group capacity, c              | 317   | 583   | 496   | 645          | 611   | -  |                  | 261   | 697   |      | 350   |    |
| v/c ratio, X                        | 0.07  | 0.55  | 0.02  | 0.52         | 0.72  | -  |                  | 0.62  | 0.67  |      | 0.37  |    |
| Total green ratio, g/C              | 0.22  | 0.39  | 0.39  | 0.22         | 0.39  | -  |                  | 0.22  | 0.49  |      | 0.22  |    |
| Uniform delay, d <sub>1</sub>       | 27.9  | 21.6  | 17.2  | 31.1         | 23.6  | -  |                  | 31.8  | 17.4  |      | 29.9  |    |
| Progression factor, PF              | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 | -  |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k                | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  | -  |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, d <sub>2</sub>   | 0.4   | 3.8   | 0.1   | 3.1          | 7.5   | -  |                  | 10.9  | 5.2   |      | 3.0   |    |
| Initial queue delay, d <sub>3</sub> |       |       |       |              |       | -  |                  |       |       |      |       |    |
| Control delay                       | 28.4  | 25.4  | 17.3  | 34.1         | 31.1  | -  |                  | 42.7  | 22.6  |      | 32.9  |    |
| Lane group LOS                      | C     | C     | B     | C            | C     | -  |                  | D     | C     |      | C     |    |
| Approach delay                      | 25.3  |       |       | 32.4         |       |    | 27.8             |       |       | 32.9 |       |    |
| Approach LOS                        | C     |       |       | C            |       |    | C                |       |       | C    |       |    |
| Intersection delay                  | 29.6  |       |       | $X_c = 0.69$ |       |    | Intersection LOS |       |       | C    |       |    |

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# HCS2000™ DETAILED REPORT

| General Information |             |  |  |  |  | Site Information |  |  |  |  |  |
|---------------------|-------------|--|--|--|--|------------------|--|--|--|--|--|
| Analyst             | trung duong |  |  |  |  | Intersection     | Ven 118 (L.A. Ave.) & Ven 34                             |  |  |  |  |
| Agency or Co.       | Ventura     |  |  |  |  | Area Type        | All other areas  |  |  |  |  |
| Date Performed      | 8/11/09     |  |  |  |  | Jurisdiction     | Analysis Year 2015 Projection                            |  |  |  |  |
| Time Period         | A.M. Peak   |  |  |  |  | Project ID       | Ven 118 & Ven 34/Donlon Inter. Improv - Exist. Alignment |  |  |  |  |

## Volume and Timing Input

|   | EB        |          |      | WB   |          |     | NB    |       |                         | SB  |    |    |
|---|-----------|----------|------|------|----------|-----|-------|-------|-------------------------|-----|----|----|
|   | LT        | TH       | RT   | LT   | TH       | RT  | LT    | TH    | RT                      | LT  | TH | RT |
| Number of lanes, N <sub>l</sub>           | 0         | 1        | 0    | 0    | 1        | 0   | 1     | 0     | 1                       | 0   | 0  | 0  |
| Lane group                                |           | TR       |      |      | LT       |     | L     |       | R                       |     |    |    |
| Volume, V (vph)                           |           | 370      | 10   | 530  | 360      |     | 70    |       | 510                     |     |    |    |
| % Heavy vehicles, %HV                     |           | 26       | 26   | 20   | 20       |     | 14    |       | 14                      |     |    |    |
| Peak-hour factor, PHF                     |           | 1.00     | 1.00 | 1.00 | 1.00     |     | 1.00  |       | 1.00                    |     |    |    |
| Pretimed (P) or actuated (A)              |           | P        | P    | P    | P        |     | P     |       | P                       |     |    |    |
| Start-up lost time, l <sub>1</sub>        |           | 2.0      |      |      | 2.0      |     | 2.0   |       | 2.0                     |     |    |    |
| Extension of effective green, e           |           | 2.0      |      |      | 2.0      |     | 2.0   |       | 2.0                     |     |    |    |
| Arrival type, AT                          |           | 3        |      |      | 3        |     | 3     |       | 3                       |     |    |    |
| Unit extension, UE                        |           | 3.0      |      |      | 3.0      |     | 3.0   |       | 3.0                     |     |    |    |
| Filtering/metering, l                     |           | 1.000    |      |      | 1.000    |     | 1.000 | 1.000 | 1.000                   |     |    |    |
| Initial unmet demand, Q <sub>b</sub>      |           | 0.0      |      |      | 0.0      |     | 0.0   |       | 0.0                     |     |    |    |
| Ped / Bike / RTOR volumes                 | 1         |          | 0    |      |          |     | 0     |       | 0                       | 0   |    |    |
| Lane width                                |           | 12.0     |      |      | 12.0     |     | 12.0  |       | 12.0                    |     |    |    |
| Parking / Grade / Parking                 | N         | 0        | N    | N    | 0        | N   | N     | 0     | N                       | N   |    | N  |
| Parking maneuvers, N <sub>m</sub>         |           |          |      |      |          |     |       |       |                         |     |    |    |
| Buses stopping, N <sub>B</sub>            |           | 0        |      |      | 0        |     | 0     |       | 0                       |     |    |    |
| Min. time for pedestrians, t <sub>p</sub> |           | 3.2      |      |      |          |     |       | 3.2   |                         | 3.2 |    |    |
| Phasing                                   | WB Only   | EB Only  | 03   | 04   | NB Only  | 06  | 07    | 08    |                         |     |    |    |
| Timing                                    | G = 120.0 | G = 65.0 | G =  | G =  | G = 20.0 | G = | G =   | G =   |                         |     |    |    |
|   | Y = 6.5   | Y = 6.5  | Y =  | Y =  | Y = 5.5  | Y = | Y =   | Y =   |                         |     |    |    |
| Duration of Analysis, T =                 |           |          |      |      |          |     |       |       | Cycle Length, C = 223.5 |     |    |    |

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB |       |    | WB |                       |    | NB               |    |       | SB |    |    |
|-------------------------------------|----|-------|----|----|-----------------------|----|------------------|----|-------|----|----|----|
|                                     | LT | TH    | RT | LT | TH                    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |    | 380   |    |    | 890                   |    | 70               |    | 510   |    |    |    |
| Lane group capacity, c              |    | 437   |    |    | 826                   |    | 142              |    | 922   |    |    |    |
| v/c ratio, X                        |    | 0.87  |    |    | 1.08                  |    | 0.49             |    | 0.55  |    |    |    |
| Total green ratio, g/C              |    | 0.29  |    |    | 0.54                  |    | 0.09             |    | 0.65  |    |    |    |
| Uniform delay, d <sub>1</sub>       |    | 75.2  |    |    | 51.8                  |    | 96.9             |    | 21.3  |    |    |    |
| Progression factor, PF              |    | 1.000 |    |    | 1.000                 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |    | 0.50  |    |    | 0.50                  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |    | 24.8  |    |    | 165.1                 |    | 12.2             |    | 2.4   |    |    |    |
| Initial queue delay, d <sub>3</sub> |    |       |    |    |                       |    |                  |    |       |    |    |    |
| Control delay                       |    | 100.1 |    |    | 216.8                 |    | 109.1            |    | 23.7  |    |    |    |
| Lane group LOS                      |    | F     |    |    | F                     |    | F                |    | C     |    |    |    |
| Approach delay                      |    | 100.1 |    |    | 216.8                 |    | 34.0             |    |       |    |    |    |
| Approach LOS                        |    | F     |    |    | F                     |    | C                |    |       |    |    |    |
| Intersection delay                  |    | 135.5 |    |    | X <sub>c</sub> = 0.95 |    | Intersection LOS |    | F     |    |    |    |

# HCS2000™ DETAILED REPORT

| General Information   |  |  |  |  |  |  | Site Information |   |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|------------------|---|--|--|--|--|--|--|
| Analyst trung duong   |  |  |  |  |  |  | Intersection     | Ven 118 & Ven<br>34/Donlon Rd                                       |  |  |  |  |  |  |
| Agency or Co.         |  |  |  |  |  |  | Area Type        | All other areas   |  |  |  |  |  |  |
| Date 2/12/2009        |  |  |  |  |  |  | Jurisdiction     | Analysis Year 2015 Projection                                       |  |  |  |  |  |  |
| Performed             |  |  |  |  |  |  | Project ID       | Ven 118 & Ven<br>34/Donlon Inter.<br>Improvement - 2 WB LT<br>Lanes |  |  |  |  |  |  |
| Time Period A.M. Peak |  |  |  |  |  |  |                  |   |  |  |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |       |      | NB       |       |       | SB   |       |      |     |
|---|------------|-----------|-------|-------|-------|------|----------|-------|-------|------|-------|------|-----|
|   | LT         | TH        | RT    | LT    | TH    | RT   | LT       | TH    | RT    | LT   | TH    | RT   |     |
| Number of lanes, N <sub>l</sub>           | 1          | 1         | 1     | 2     | 1     | 0    | 0        | 1     | 1     | 0    | 1     | 0    |     |
| Lane group                                | L          | T         | R     | L     | TR    |      |          | LT    | R     |      | LTR   |      |     |
| Volume, V (vph)                           | 50         | 320       | 10    | 420   | 360   | 10   | 70       | 30    | 470   | 10   | 100   | 10   |     |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20    | 20   | 14       | 14    | 14    | 0    | 0     | 0    |     |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00  | 1.00 | 1.00     | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |     |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P     | P    | P        | P     | P     | P    | P     | P    |     |
| Start-up lost time, l <sub>1</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |      |          | 2.0   | 2.0   |      | 2.0   |      |     |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |      |          | 2.0   | 2.0   |      | 2.0   |      |     |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3     |      |          | 3     | 3     |      | 3     |      |     |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0   |      |          | 3.0   | 3.0   |      | 3.0   |      |     |
| Filtering/metering, l                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000 |      |          | 1.000 | 1.000 |      | 1.000 |      |     |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0   |      |          | 0.0   | 0.0   |      | 0.0   |      |     |
| Ped / Bike / RTOR volumes                 | 0          |           | 0     | 0     |       |      | 0        | 0     |       | 0    | 0     | 0    |     |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0  |      |          | 12.0  | 12.0  |      | 12.0  |      |     |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0     | N    | N        | 0     | N     | N    | 0     | N    |     |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |       |      |          |       |       |      |       |      |     |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0     |      |          | 0     | 0     |      | 0     |      |     |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2   |      |          | 3.2   |       |      | 3.2   |      |     |
| Phasing                                   | Excl. Left | Thru & RT | 03    |       | 04    |      | NS Perm  |       | 06    |      | 07    |      | 08  |
| Timing                                    | G = 25.0   | G = 35.0  | G =   |       | G =   |      | G = 20.0 |       | G =   |      | G =   |      | G = |

|                                  |           |       |       |           |                          |       |       |
|----------------------------------|-----------|-------|-------|-----------|--------------------------|-------|-------|
| $Y = 5.5$                        | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 4.5$ | $Y =$                    | $Y =$ | $Y =$ |
| Duration of Analysis, $T = 1.00$ |           |       |       |           | Cycle Length, $C = 95.5$ |       |       |

### Lane Group Capacity, Control Delay, and LOS Determination

|                            | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|----------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                            | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, $v$    | 50    | 320   | 10    | 420          | 370   |    |                  | 100   | 470   |      | 120   |    |
| Lane group capacity, $c$   | 375   | 553   | 470   | 764          | 578   |    |                  | 252   | 734   |      | 385   |    |
| v/c ratio, $X$             | 0.13  | 0.58  | 0.02  | 0.55         | 0.64  |    |                  | 0.40  | 0.64  |      | 0.31  |    |
| Total green ratio, g/C     | 0.26  | 0.37  | 0.37  | 0.26         | 0.37  |    |                  | 0.21  | 0.52  |      | 0.21  |    |
| Uniform delay, $d_1$       | 27.0  | 24.3  | 19.3  | 30.4         | 25.0  |    |                  | 32.5  | 16.6  |      | 31.9  |    |
| Progression factor, PF     | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, $k$     | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, $d_2$   | 0.7   | 4.4   | 0.1   | 2.9          | 5.5   |    |                  | 4.7   | 4.3   |      | 2.1   |    |
| Initial queue delay, $d_3$ |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay              | 27.7  | 28.8  | 19.4  | 33.3         | 30.5  |    |                  | 37.2  | 20.9  |      | 34.0  |    |
| Lane group LOS             | C     | C     | B     | C            | C     |    |                  | D     | C     |      | C     |    |
| Approach delay             | 28.4  |       |       | 32.0         |       |    | 23.8             |       |       | 34.0 |       |    |
| Approach LOS               | C     |       |       | C            |       |    | C                |       |       | C    |       |    |
| Intersection delay         | 28.9  |       |       | $X_c = 0.64$ |       |    | Intersection LOS |       |       | C    |       |    |

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Version 4.1d

1 Aug 2012

# HCS2000™ DETAILED REPORT

| General Information   |  |  |  |  |  | Site Information |   |  |  |  |  |
|-----------------------|--|--|--|--|--|------------------|---|--|--|--|--|
| Analyst trung duong   |  |  |  |  |  | Intersection     | Ven 118 & Ven 34/Donlon Rd                                |  |  |  |  |
| Agency or Co.         |  |  |  |  |  | Area Type        | All other areas   |  |  |  |  |
| Date 2/13/2009        |  |  |  |  |  | Jurisdiction     | Analysis Year 2015 Projection                             |  |  |  |  |
| Performed             |  |  |  |  |  | Project ID       | Ven 118 & Ven 34/Donlon Inter. Improvement - 1 WB LT Lane |  |  |  |  |
| Time Period A.M. Peak |  |  |  |  |  |                  |   |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |          |      | NB   |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|----------|------|------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH       | RT   | LT   | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>l</sub>           | 1          | 1         | 1     | 1     | 1        | 0    | 0    | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR       |      |      | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 50         | 320       | 10    | 420   | 360      | 10   | 70   | 30    | 470   | 10   | 100   | 10   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20       | 20   | 14   | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00     | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P        | P    | P    | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>1</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3        |      |      | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0      |      |      | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, I                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000    |      |      | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0      |      |      | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 1          |           | 0     | 0     |          | 0    | 0    |       | 0     | 0    |       | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0     |      |      | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0        | N    | N    | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |          |      |      |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0        |      |      | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, t <sub>p</sub> |            | 3.2       |       |       | 3.2      |      |      | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    | 04    | NS Perm  | 06   | 07   | 08    |       |      |       |      |
| Timing                                    | G = 33.0   | G = 29.0  | G =   | G =   | G = 14.0 | G =  | G =  | G =   |       |      |       |      |

|           |           |       |       |           |       |       |       |
|-----------|-----------|-------|-------|-----------|-------|-------|-------|
| $Y = 5.5$ | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 4.5$ | $Y =$ | $Y =$ | $Y =$ |
|-----------|-----------|-------|-------|-----------|-------|-------|-------|

|                                  |  |  |  |  |  |  |                          |
|----------------------------------|--|--|--|--|--|--|--------------------------|
| Duration of Analysis, $T = 1.00$ |  |  |  |  |  |  | Cycle Length, $C = 91.5$ |
|----------------------------------|--|--|--|--|--|--|--------------------------|

| Lane Group Capacity, Control Delay, and LOS Determination |       |       |       |              |       |    |                  |       |       |      |       |    |
|---|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|   | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|   | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, $v$                                   | 50    | 320   | 10    | 420          | 370   |    |                  | 100   | 470   |      | 120   |    |
| Lane group capacity, $c$                                  | 517   | 478   | 406   | 542          | 500   |    |                  | 162   | 798   |      | 280   |    |
| v/c ratio, $X$  | 0.10  | 0.67  | 0.02  | 0.77         | 0.74  |    |                  | 0.62  | 0.59  |      | 0.43  |    |
| Total green ratio, g/C                                    | 0.36  | 0.32  | 0.32  | 0.36         | 0.32  |    |                  | 0.15  | 0.56  |      | 0.15  |    |
| Uniform delay, $d_1$                                      | 19.4  | 27.1  | 21.5  | 26.0         | 27.9  |    |                  | 36.2  | 13.1  |      | 35.1  |    |
| Progression factor, PF                                    | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k                                      | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, $d_2$                                  | 0.4   | 7.5   | 0.1   | 11.1         | 10.0  |    |                  | 17.5  | 3.2   |      | 4.8   |    |
| Initial queue delay, $d_3$                                |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay   | 19.7  | 34.6  | 21.6  | 37.1         | 37.9  |    |                  | 53.7  | 16.3  |      | 39.9  |    |
| Lane group LOS  | B     | C     | C     | D            | D     |    |                  | D     | B     |      | D     |    |
| Approach delay  | 32.3  |       |       | 37.5         |       |    | 22.9             |       |       | 39.9 |       |    |
| Approach LOS  | C     |       |       | D            |       |    | C                |       |       | D    |       |    |
| Intersection delay  | 32.1  |       |       | $X_c = 0.73$ |       |    | Intersection LOS |       |       | C    |       |    |

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Version 4.1d

# ROUNDABOUTS - UNSIGNALIZED INTERSECTIONS WORKSHEET

| General Information |             | Site Information |                      |  |
|---------------------|-------------|------------------|----------------------|--|
| Analyst             | trung duong | Intersection     | Ven 118/34/Donlon Rd |  |
| Agency/Co.          | Ventura     | Jurisdiction     |                      |  |
| Date                | 2/12/09     | Analysis Year    | 2015 Projection      |  |
| Performed           |             |                  |                      |  |
| Time Period         | A.M. Peak   |                  |                      |  |

Project Description Ven 118 & Ven  
34/Donlon Intersection Improvement

## Volume Adjustments

|            |                     | EB   | WB   | NB   | SB   |
|------------|---------------------|------|------|------|------|
| LT Traffic | Volume, veh/h       | 50   | 420  | 70   | 10   |
|            | PHF                 | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate,<br>veh/h | 50   | 420  | 70   | 10   |
| TH Traffic | Volume, veh/h       | 320  | 360  | 30   | 100  |
|            | PHF                 | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate,<br>veh/h | 320  | 360  | 30   | 100  |
| RT Traffic | Volume, veh/h       | 10   | 10   | 470  | 10   |
|            | PHF                 | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate,<br>veh/h | 10   | 10   | 470  | 10   |

## Approach Flow Computation

| Approach Flow (veh/h) | Va (veh/h) |
|-----------------------|------------|
| Vae                   | 380        |
| Vaw                   | 790        |
| Van                   | 570        |
| Vas                   | 120        |

## Circulating Flow Computation

| Approach Flow (veh/h) | Vc (veh/h) |
|-----------------------|------------|
| Vce                   | 530        |
| Vcw                   | 150        |
| Vcn                   | 380        |
| Vcs                   | 850        |

## Capacity Computation

|           |             | EB   | WB   | NB   | SB   |
|-----------|-------------|------|------|------|------|
| Capacity  | Upper bound | 911  | 1231 | 1027 | 703  |
|           | Lower bound | 734  | 1021 | 837  | 552  |
| v/c Ratio | Upper bound | 0.42 | 0.64 | 0.56 | 0.17 |
|           | Lower bound | 0.52 | 0.77 | 0.68 | 0.22 |

# HCS2000™ DETAILED REPORT

| General Information                          |  |  |  |  |  | Site Information  |  |  |  |  |  |
|--|--|--|--|--|--|---|--|--|--|--|--|
| Analyst trung duong<br>Agency or Co. Ventura |  |  |  |  |  | Intersection Ven 118 (L.A. Ave.) & Ven 34                             |  |  |  |  |  |
| Date 2/23/09                                 |  |  |  |  |  | Area Type All other areas   |  |  |  |  |  |
| Performed Time Period A.M. Peak              |  |  |  |  |  | Jurisdiction  |  |  |  |  |  |
|  |  |  |  |  |  | Analysis Year 2015 Projection   |  |  |  |  |  |
|  |  |  |  |  |  | Project ID Ven 118 & Ven 34/Donlon Inter. - Bypass - Exist. Intersect |  |  |  |  |  |

## Volume and Timing Input

|   | EB       |           |      | WB    |    |          | NB    |       |       | SB |    |    |
|---|----------|-----------|------|-------|----|----------|-------|-------|-------|----|----|----|
|   | LT       | TH        | RT   | LT    | TH | RT       | LT    | TH    | RT    | LT | TH | RT |
| Number of lanes, N <sub>1</sub>           | 0        | 1         | 0    | 0     | 1  | 0        | 1     | 0     | 1     | 0  | 0  | 0  |
| Lane group                                |          | TR        |      |       | LT |          | L     |       | R     |    |    |    |
| Volume, V (vph)                           | 370      | 10        | 0    | 360   |    |          | 70    |       | 0     |    |    |    |
| % Heavy vehicles, %HV                     | 26       | 26        | 20   | 20    |    |          | 14    |       | 14    |    |    |    |
| Peak-hour factor, PHF                     | 1.00     | 1.00      | 1.00 | 1.00  |    |          | 1.00  |       | 1.00  |    |    |    |
| Pretimed (P) or actuated (A)              | P        | P         | P    | P     |    |          | P     |       | P     |    |    |    |
| Start-up lost time, l <sub>1</sub>        | 2.0      |           |      | 2.0   |    |          | 2.0   |       | 2.0   |    |    |    |
| Extension of effective green, e           | 2.0      |           |      | 2.0   |    |          | 2.0   |       | 2.0   |    |    |    |
| Arrival type, AT                          | 3        |           |      | 3     |    |          | 3     |       | 3     |    |    |    |
| Unit extension, UE                        | 3.0      |           |      | 3.0   |    |          | 3.0   |       | 3.0   |    |    |    |
| Filtering/metering, I                     | 1.000    |           |      | 1.000 |    |          | 1.000 | 1.000 | 1.000 |    |    |    |
| Initial unmet demand, Q <sub>b</sub>      | 0.0      |           |      | 0.0   |    |          | 0.0   |       | 0.0   |    |    |    |
| Ped / Bike / RTOR volumes                 | 1        |           | 0    |       |    |          | 0     |       | 0     | 0  |    |    |
| Lane width                                | 12.0     |           |      | 12.0  |    |          | 12.0  |       | 12.0  |    |    |    |
| Parking / Grade / Parking                 | N        | 0         | N    | N     | 0  | N        | N     | 0     | N     | N  |    | N  |
| Parking maneuvers, N <sub>m</sub>         |          |           |      |       |    |          |       |       |       |    |    |    |
| Buses stopping, N <sub>B</sub>            | 0        |           |      | 0     |    |          | 0     |       | 0     |    |    |    |
| Min. time for pedestrians, t <sub>p</sub> | 3.2      |           |      |       |    |          | 3.2   |       | 3.2   |    |    |    |
| Phasing                                   | WB Only  | Thru & RT | 03   | 04    |    | NB Only  | 06    | 07    | 08    |    |    |    |
| Timing                                    | G = 20.0 | G = 40.0  | G =  | G =   |    | G = 25.0 | G =   | G =   | G =   |    |    |    |

|                                |           |                         |       |         |       |       |       |
|--------------------------------|-----------|-------------------------|-------|---------|-------|-------|-------|
| $Y = 5.5$                      | $Y = 5.5$ | $Y =$                   | $Y =$ | $Y = 5$ | $Y =$ | $Y =$ | $Y =$ |
| Duration of Analysis, T = 1.00 |           | Cycle Length, C = 101.0 |       |         |       |       |       |

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB   |       |    | WB           |       |    | NB               |    |       | SB |    |    |
|-------------------------------------|------|-------|----|--------------|-------|----|------------------|----|-------|----|----|----|
|                                     | LT   | TH    | RT | LT           | TH    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |      | 380   |    |              | 360   |    | 70               |    | 0     |    |    |    |
| Lane group capacity, c              |      | 595   |    |              | 1027  |    | 392              |    | 701   |    |    |    |
| v/c ratio, X                        |      | 0.64  |    |              | 0.35  |    | 0.18             |    | 0.00  |    |    |    |
| Total green ratio, g/C              |      | 0.40  |    |              | 0.65  |    | 0.25             |    | 0.50  |    |    |    |
| Uniform delay, d <sub>1</sub>       |      | 24.7  |    |              | 8.1   |    | 29.9             |    | 12.9  |    |    |    |
| Progression factor, PF              |      | 1.000 |    |              | 1.000 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |      | 0.50  |    |              | 0.50  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |      | 5.3   |    |              | 0.9   |    | 1.0              |    | 0.0   |    |    |    |
| Initial queue delay, d <sub>3</sub> |      |       |    |              |       |    |                  |    |       |    |    |    |
| Control delay                       |      | 30.0  |    |              | 9.0   |    | 30.9             |    | 12.9  |    |    |    |
| Lane group LOS                      |      | C     |    |              | A     |    | C                |    | B     |    |    |    |
| Approach delay                      | 30.0 |       |    | 9.0          |       |    | 30.9             |    |       |    |    |    |
| Approach LOS                        | C    |       |    | A            |       |    | C                |    |       |    |    |    |
| Intersection delay                  | 20.7 |       |    | $X_c = 0.30$ |       |    | Intersection LOS |    |       | C  |    |    |

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**HCS2000™ DETAILED REPORT**

| <b>General Information</b> |  |  |  |  |  | <b>Site Information</b>          |  |  |  |  |  |
|----------------------------|--|--|--|--|--|----------------------------------|--|--|--|--|--|
| Analyst trung duong        |  |  |  |  |  | Intersection Ven 118 & Bypass St |  |  |  |  |  |
| Agency or Co. Ventura      |  |  |  |  |  | Area Type All other areas        |  |  |  |  |  |
| Date Performed 2/23/09     |  |  |  |  |  | Jurisdiction                     |  |  |  |  |  |
| Time Period A.M. Peak      |  |  |  |  |  | Analysis Year 2015 Projection    |  |  |  |  |  |
|                            |  |  |  |  |  | Ven 118 & Ven                    |  |  |  |  |  |
|                            |  |  |  |  |  | Project ID 34/Donlon Improv-     |  |  |  |  |  |
|                            |  |  |  |  |  | Bypass-East Intersect            |  |  |  |  |  |

**Volume and Timing Input**

|   | EB    |       |       | WB    |    |    | NB    |       |       | SB |    |     |
|---|-------|-------|-------|-------|----|----|-------|-------|-------|----|----|-----|
|   | LT    | TH    | RT    | LT    | TH | RT | LT    | TH    | RT    | LT | TH | RT  |
| Number of lanes, N <sub>1</sub>           | 0     | 1     | 1     | 2     | 1  | 0  | 1     | 0     | 1     | 0  | 0  | 0   |
| Lane group                                |       | T     | R     | L     | T  |    | L     |       | R     |    |    |     |
| Volume, V (vph)                           | 330   | 0     | 420   | 370   |    |    | 0     |       | 470   |    |    |     |
| % Heavy vehicles, %HV                     | 26    | 26    | 20    | 20    |    |    | 14    |       | 14    |    |    |     |
| Peak-hour factor, PHF                     | 1.00  | 1.00  | 1.00  | 1.00  |    |    | 1.00  |       | 1.00  |    |    |     |
| Pretimed (P) or actuated (A)              | P     | P     | P     | P     |    |    | P     |       | P     |    |    |     |
| Start-up lost time, l <sub>1</sub>        | 2.0   | 2.0   | 2.0   | 2.0   |    |    | 2.0   |       | 2.0   |    |    |     |
| Extension of effective green, e           | 2.0   | 2.0   | 2.0   | 2.0   |    |    | 2.0   |       | 2.0   |    |    |     |
| Arrival type, AT                          | 3     | 3     | 3     | 3     |    |    | 3     |       | 3     |    |    |     |
| Unit extension, UE                        | 3.0   | 3.0   | 3.0   | 3.0   |    |    | 3.0   |       | 3.0   |    |    |     |
| Filtering/metering, l                     | 1.000 | 1.000 | 1.000 | 1.000 |    |    | 1.000 | 1.000 | 1.000 |    |    |     |
| Initial unmet demand, Q <sub>b</sub>      | 0.0   | 0.0   | 0.0   | 0.0   |    |    | 0.0   |       | 0.0   |    |    |     |
| Ped / Bike / RTOR volumes                 | 1     |       | 0     |       |    |    | 0     |       | 0     | 0  |    |     |
| Lane width                                | 12.0  | 12.0  | 12.0  | 12.0  |    |    | 12.0  |       | 12.0  |    |    |     |
| Parking / Grade / Parking                 | N     | 0     | N     | N     | 0  | N  | N     | 0     | N     | N  |    | N   |
| Parking maneuvers, N <sub>m</sub>         |       |       |       |       |    |    |       |       |       |    |    |     |
| Buses stopping, N <sub>B</sub>            | 0     | 0     | 0     | 0     |    |    | 0     |       | 0     |    |    |     |
| Min. time for pedestrians, G <sub>p</sub> |       | 3.2   |       |       |    |    |       | 3.2   |       |    |    | 3.2 |

| Phasing | WB Only  | EB Only  | 03  | 04  | NB Only  | 06  | 07  | 08  |
|---------|----------|----------|-----|-----|----------|-----|-----|-----|
| Timing  | G = 35.0 | G = 30.0 | G = | G = | G = 18.0 | G = | G = | G = |
|         | Y = 5.5  | Y = 5.5  | Y = | Y = | Y = 5    | Y = | Y = | Y = |

Duration of Analysis, T =

Cycle Length, C = 99.0

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB |       |       | WB           |       |    | NB               |    |       | SB |    |    |
|-------------------------------------|----|-------|-------|--------------|-------|----|------------------|----|-------|----|----|----|
|                                     | LT | TH    | RT    | LT           | TH    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |    | 330   | 0     | 420          | 370   |    | 0                |    | 470   |    |    |    |
| Lane group capacity, c              |    | 457   | 388   | 1032         | 560   |    | 288              |    | 830   |    |    |    |
| v/c ratio, X                        |    | 0.72  | 0.00  | 0.41         | 0.66  |    | 0.00             |    | 0.57  |    |    |    |
| Total green ratio, g/C              |    | 0.30  | 0.30  | 0.35         | 0.35  |    | 0.18             |    | 0.59  |    |    |    |
| Uniform delay, d <sub>1</sub>       |    | 30.8  | 24.0  | 24.2         | 27.0  |    | 33.1             |    | 12.7  |    |    |    |
| Progression factor, PF              |    | 1.000 | 1.000 | 1.000        | 1.000 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |    | 0.50  | 0.50  | 0.50         | 0.50  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |    | 10.0  | 0.0   | 1.2          | 6.2   |    | 0.0              |    | 2.8   |    |    |    |
| Initial queue delay, d <sub>3</sub> |    |       |       |              |       |    |                  |    |       |    |    |    |
| Control delay                       |    | 40.8  | 24.0  | 25.4         | 33.2  |    | 33.1             |    | 15.5  |    |    |    |
| Lane group LOS                      |    | D     | C     | C            | C     |    | C                |    | B     |    |    |    |
| Approach delay                      |    | 40.8  |       | 29.0         |       |    | 15.5             |    |       |    |    |    |
| Approach LOS                        |    | D     |       | C            |       |    | B                |    |       |    |    |    |
| Intersection delay                  |    | 27.5  |       | $X_c = 0.62$ |       |    | Intersection LOS |    |       | C  |    |    |

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# HCS2000™ DETAILED REPORT

| General Information    |  |  |  |  |  | Site Information |   |  |  |  |  |
|------------------------|--|--|--|--|--|------------------|---|--|--|--|--|
| Analyst trung duong    |  |  |  |  |  | Intersection     | Ven 34 (Somis Rd)& Bypass St                          |  |  |  |  |
| Agency or Co. Ventura  |  |  |  |  |  | Area Type        | All other areas                                       |  |  |  |  |
| Date Performed 2/24/09 |  |  |  |  |  | Jurisdiction     | Analysis Year 2015 Projection                         |  |  |  |  |
| Time Period A.M. Peak  |  |  |  |  |  | Project ID       | Ven 118 & Ven 34/Donlon Improv-Bypass-South Intersect |  |  |  |  |

## Volume and Timing Input

|   | EB       |     |     | WB    |       |          | NB  |       |       | SB   |       |    |
|---|----------|-----|-----|-------|-------|----------|-----|-------|-------|------|-------|----|
|   | LT       | TH  | RT  | LT    | TH    | RT       | LT  | TH    | RT    | LT   | TH    | RT |
| Number of lanes, N <sub>l</sub>           | 0        | 0   | 0   | 1     | 0     | 1        | 0   | 1     | 1     | 0    | 1     | 0  |
| Lane group                                |          |     |     | L     |       | R        |     | T     | R     |      | LT    |    |
| Volume, V (vph)                           |          |     |     | 420   |       | 0        |     | 100   | 470   | 0    | 110   |    |
| % Heavy vehicles, %HV                     |          |     |     | 20    |       | 0        |     | 0     | 14    | 0    | 0     |    |
| Peak-hour factor, PHF                     |          |     |     | 1.00  |       | 1.00     |     | 1.00  | 1.00  | 1.00 | 1.00  |    |
| Pretimed (P) or actuated (A)              |          |     |     | P     |       | P        |     | P     | P     | A    | P     |    |
| Start-up lost time, l <sub>s</sub>        |          |     |     | 2.0   |       | 2.0      |     | 2.0   | 2.0   |      | 2.0   |    |
| Extension of effective green, e           |          |     |     | 2.0   |       | 2.0      |     | 2.0   | 2.0   |      | 2.0   |    |
| Arrival type, AT                          |          |     |     | 3     |       | 3        |     | 3     | 3     |      | 3     |    |
| Unit extension, UE                        |          |     |     | 3.0   |       | 3.0      |     | 3.0   | 3.0   |      | 3.0   |    |
| Filtering/metering, l                     |          |     |     | 1.000 | 1.000 | 1.000    |     | 1.000 | 1.000 |      | 1.000 |    |
| Initial unmet demand, Q <sub>b</sub>      |          |     |     | 0.0   |       | 0.0      |     | 0.0   | 0.0   |      | 0.0   |    |
| Ped / Bike / RTOR volumes                 | 1        |     |     | 0     |       | 0        |     | 0     |       |      |       |    |
| Lane width                                |          |     |     | 12.0  |       | 12.0     |     | 12.0  | 12.0  |      | 12.0  |    |
| Parking / Grade / Parking                 | N        |     | N   | N     | 0     | N        | N   | 0     | N     | N    | 0     | N  |
| Parking maneuvers, N <sub>m</sub>         |          |     |     |       |       |          |     |       |       |      |       |    |
| Buses stopping, N <sub>B</sub>            |          |     |     | 0     |       | 0        |     | 0     | 0     |      | 0     |    |
| Min. time for pedestrians, t <sub>p</sub> |          |     | 3.2 |       |       | 3.2      |     |       | 3.2   |      |       |    |
| Phasing                                   | WB Only  | 02  | 03  | 04    |       | NS Perm  | 06  | 07    | 08    |      |       |    |
| Timing                                    | G = 55.0 | G = | G = | G =   |       | G = 50.0 | G = | G =   | G =   |      |       |    |
|   | Y = 5.5  | Y = | Y = | Y =   |       | Y = 5    | Y = | Y =   | Y =   |      |       |    |

Duration of Analysis, T =

Cycle Length, C = 115.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB   |    |    | WB           |    |       | NB               |       |       | SB   |       |    |
|-------------------------------------|------|----|----|--------------|----|-------|------------------|-------|-------|------|-------|----|
|                                     | LT   | TH | RT | LT           | TH | RT    | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow-rate, v               |      |    |    | 420          |    | 0     |                  | 100   | 470   |      | 110   |    |
| Lane group capacity, c              |      |    |    | 716          |    | 769   |                  | 823   | 1417  |      | 823   |    |
| v/c ratio, X                        |      |    |    | 0.59         |    | 0.00  |                  | 0.12  | 0.33  |      | 0.13  |    |
| Total green ratio, g/C              |      |    |    | 0.48         |    | 0.48  |                  | 0.43  | 1.00  |      | 0.43  |    |
| Uniform delay, d <sub>1</sub>       |      |    |    | 22.0         |    | 15.8  |                  | 19.6  | 0.0   |      | 19.7  |    |
| Progression factor, PF              |      |    |    | 1.000        |    | 1.000 |                  | 1.000 | 0.950 |      | 1.000 |    |
| Delay calibration, k                |      |    |    | 0.50         |    | 0.50  |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, d <sub>2</sub>   |      |    |    | 3.6          |    | 0.0   |                  | 0.3   | 0.6   |      | 0.3   |    |
| Initial queue delay, d <sub>3</sub> |      |    |    |              |    |       |                  |       |       |      |       |    |
| Control delay                       |      |    |    | 25.5         |    | 15.8  |                  | 19.9  | 0.6   |      | 20.1  |    |
| Lane group LOS                      |      |    |    | C            |    | B     |                  | B     | A     |      | C     |    |
| Approach delay                      |      |    |    | 25.5         |    |       | 4.0              |       |       | 20.1 |       |    |
| Approach LOS                        |      |    |    | C            |    |       | A                |       |       | C    |       |    |
| Intersection delay                  | 13.8 |    |    | $X_c = 0.37$ |    |       | Intersection LOS |       |       | B    |       |    |

## HCS2000™ DETAILED REPORT

| General Information     |  |  |  |  |  | Site Information |  |  |  |  |  |
|-------------------------|--|--|--|--|--|------------------|--|--|--|--|--|
| Analyst trung duong     |  |  |  |  |  | Intersection     | Ven 118 & Ven<br>34/Donlon Rd                                    |  |  |  |  |
| Agency or Co.           |  |  |  |  |  | Area Type        | All other areas  |  |  |  |  |
| Date Performed 6/9/2009 |  |  |  |  |  | Jurisdiction     | Analysis Year 2015 Projection                                    |  |  |  |  |
| Time Period A.M. Peak   |  |  |  |  |  | Project ID       | Ven 118 & Ven<br>34/Donlon Inter.<br>Improvement - Bridge<br>Alt |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |       |      | NB       |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|-------|------|----------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH    | RT   | LT       | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>1</sub>           | 1          | 1         | 1     | 2     | 1     | 0    | 0        | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR    |      |          | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 50         | 320       | 10    | 420   | 360   | 10   | 70       | 30    | 470   | 10   | 100   | 10   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20    | 20   | 14       | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00  | 1.00 | 1.00     | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P     | P    | P        | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>1</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |      |          | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |      |          | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3     |      |          | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0   |      |          | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, l                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000 |      |          | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0   |      |          | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 0          |           | 0     | 0     |       |      | 0        | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0  |      |          | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0     | N    | N        | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |       |      |          |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0     |      |          | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2   |      |          | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    |       | 04    |      | NS Perm  |       | 06    |      | 07    |      |
| Timing                                    | G = 25.0   | G = 35.0  | G =   |       | G =   |      | G = 20.0 |       | G =   |      | G =   |      |

|           |           |       |       |           |       |       |       |
|-----------|-----------|-------|-------|-----------|-------|-------|-------|
| $Y = 5.5$ | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 4.5$ | $Y =$ | $Y =$ | $Y =$ |
|-----------|-----------|-------|-------|-----------|-------|-------|-------|

|                                   |  |  |  |  |  |                        |  |  |
|-----------------------------------|--|--|--|--|--|------------------------|--|--|
| Duration of Analysis, T =<br>1.00 |  |  |  |  |  | Cycle Length, C = 95.5 |  |  |
|-----------------------------------|--|--|--|--|--|------------------------|--|--|

### Lane Group Capacity, Control Delay, and LOS Determination

|                            | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|----------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                            | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v      | 50    | 320   | 10    | 420          | 370   |    |                  | 100   | 470   |      | 120   |    |
| Lane group capacity, c     | 375   | 553   | 470   | 764          | 578   |    |                  | 252   | 734   |      | 385   |    |
| v/c ratio, X               | 0.13  | 0.58  | 0.02  | 0.55         | 0.64  |    |                  | 0.40  | 0.64  |      | 0.31  |    |
| Total green ratio, g/C     | 0.26  | 0.37  | 0.37  | 0.26         | 0.37  |    |                  | 0.21  | 0.52  |      | 0.21  |    |
| Uniform delay, $d_1$       | 27.0  | 24.3  | 19.3  | 30.4         | 25.0  |    |                  | 32.5  | 16.6  |      | 31.9  |    |
| Progression factor, PF     | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k       | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, $d_2$   | 0.7   | 4.4   | 0.1   | 2.9          | 5.5   |    |                  | 4.7   | 4.3   |      | 2.1   |    |
| Initial queue delay, $d_3$ |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay              | 27.7  | 28.8  | 19.4  | 33.3         | 30.5  |    |                  | 37.2  | 20.9  |      | 34.0  |    |
| Lane group LOS             | C     | C     | B     | C            | C     |    |                  | D     | C     |      | C     |    |
| Approach delay             | 28.4  |       |       | 32.0         |       |    | 23.8             |       |       | 34.0 |       |    |
| Approach LOS               | C     |       |       | C            |       |    | C                |       |       | C    |       |    |
| Intersection delay         | 28.9  |       |       | $X_c = 0.64$ |       |    | Intersection LOS |       |       | C    |       |    |

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| General Information                       |             |          |      |      |          | Site Information |                                |       |       |    |     |
|---|-------------|----------|------|------|----------|------------------|--------------------------------|-------|-------|----|-----|
| Analyst                                   | trung duong |          |      |      |          | Intersection     | Ven 118 (L.A. Ave.) & Ven 34   |       |       |    |     |
| Agency or Co.                             | Ventura     |          |      |      |          | Area Type        | All other areas                |       |       |    |     |
| Date                                      | 8/11/2009   |          |      |      |          | Jurisdiction     | 2015 Projection                |       |       |    |     |
| Performed                                 | P.M. Peak   |          |      |      |          | Analysis Year    | Ven 118 & Ven 34/Donlon Inter. |       |       |    |     |
| Time Period                               |             |          |      |      |          | Project ID       | Improvement - Exist. Align     |       |       |    |     |
| Volume and Timing Input                   |             |          |      |      |          |                  |                                |       |       |    |     |
|   |             | EB       |      |      | WB       |                  |                                | NB    |       |    | SB  |
|   |             | LT       | TH   | RT   | LT       | TH               | RT                             | LT    | TH    | RT | LT  |
| Number of lanes, N <sub>l</sub>           |             | 0        | 1    | 0    | 0        | 1                | 0                              | 1     | 0     | 1  | 0   |
| Lane group                                |             | TR       |      |      | LT       |                  |                                | L     |       |    | R   |
| Volume, V (vph)                           |             | 360      | 10   | 430  | 450      |                  | 100                            |       | 550   |    |     |
| % Heavy vehicles, %HV                     |             | 26       | 26   | 20   | 20       |                  | 14                             |       | 14    |    |     |
| Peak-hour factor, PHF                     |             | 1.00     | 1.00 | 1.00 | 1.00     |                  | 1.00                           |       | 1.00  |    |     |
| Pretimed (P) or actuated (A)              |             | P        | P    | P    | P        |                  | P                              |       | P     |    |     |
| Start-up lost time, l <sub>1</sub>        |             | 2.0      |      |      | 2.0      |                  | 2.0                            |       | 2.0   |    |     |
| Extension of effective green, e           |             | 2.0      |      |      | 2.0      |                  | 2.0                            |       | 2.0   |    |     |
| Arrival type, AT                          |             | 3        |      |      | 3        |                  | 3                              |       | 3     |    |     |
| Unit extension, UE                        |             | 3.0      |      |      | 3.0      |                  | 3.0                            |       | 3.0   |    |     |
| Filtering/metering, l                     |             | 1.000    |      |      | 1.000    |                  | 1.000                          | 1.000 | 1.000 |    |     |
| Initial unmet demand, Q <sub>b</sub>      |             | 0.0      |      |      | 0.0      |                  | 0.0                            |       | 0.0   |    |     |
| Ped / Bike / RTOR volumes                 |             | 1        |      | 0    |          |                  | 0                              |       | 0     | 0  |     |
| Lane width                                |             | 12.0     |      |      | 12.0     |                  | 12.0                           |       | 12.0  |    |     |
| Parking / Grade / Parking                 |             | N        | 0    | N    | N        | 0                | N                              | N     | 0     | N  | N   |
| Parking maneuvers, N <sub>m</sub>         |             |          |      |      |          |                  |                                |       |       |    |     |
| Buses stopping, N <sub>B</sub>            |             | 0        |      |      | 0        |                  | 0                              |       | 0     |    |     |
| Min. time for pedestrians, G <sub>p</sub> |             | 3.2      |      |      |          |                  |                                | 3.2   |       |    | 3.2 |
| Phasing                                   | WB Only     | EB Only  | 03   | 04   | NB Only  | 06               | 07                             | 08    |       |    |     |
| Timing                                    | G = 110.0   | G = 75.0 | G =  | G =  | G = 20.0 | G =              | G =                            | G =   |       |    |     |
|   | Y = 6.5     | Y = 6.5  | Y =  | Y =  | Y = 5.5  | Y =              | Y =                            | Y =   |       |    |     |

Duration of Analysis, T =  
1.00

Cycle Length, C = 223.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB |       |    | WB |                       |    | NB               |    |       | SB |    |    |
|-------------------------------------|----|-------|----|----|-----------------------|----|------------------|----|-------|----|----|----|
|                                     | LT | TH    | RT | LT | TH                    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |    | 370   |    |    | 880                   |    | 100              |    | 550   |    |    |    |
| Lane group capacity, c              |    | 504   |    |    | 761                   |    | 142              |    | 859   |    |    |    |
| v/c ratio, X                        |    | 0.73  |    |    | 1.16                  |    | 0.70             |    | 0.64  |    |    |    |
| Total green ratio, g/C              |    | 0.34  |    |    | 0.49                  |    | 0.09             |    | 0.61  |    |    |    |
| Uniform delay, d <sub>1</sub>       |    | 65.5  |    |    | 56.8                  |    | 98.9             |    | 28.3  |    |    |    |
| Progression factor, PF              |    | 1.000 |    |    | 1.000                 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |    | 0.50  |    |    | 0.50                  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |    | 9.7   |    |    | 298.0                 |    | 28.6             |    | 3.7   |    |    |    |
| Initial queue delay, d <sub>3</sub> |    |       |    |    |                       |    |                  |    |       |    |    |    |
| Control delay                       |    | 75.1  |    |    | 354.7                 |    | 127.5            |    | 32.0  |    |    |    |
| Lane group LOS                      |    | E     |    |    | F                     |    | F                |    | C     |    |    |    |
| Approach delay                      |    | 75.1  |    |    | 354.7                 |    | 46.7             |    |       |    |    |    |
| Approach LOS                        |    | E     |    |    | F                     |    | D                |    |       |    |    |    |
| Intersection delay                  |    | 194.9 |    |    | X <sub>c</sub> = 0.96 |    | Intersection LOS |    | F     |    |    |    |

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# HCS2000™ DETAILED REPORT

| General Information   |  |  |  |  |  | Site Information  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|---|--|--|--|--|--|
| Analyst trung duong   |  |  |  |  |  | Intersection Ven 118 & Ven 34/Donlon Rd                               |  |  |  |  |  |
| Agency or Co. Ventura |  |  |  |  |  | Area Type All other areas   |  |  |  |  |  |
| Date 2/23/2009        |  |  |  |  |  | Jurisdiction Analysis Year 2015 Projection                            |  |  |  |  |  |
| Performed P.M. Peak   |  |  |  |  |  | Project ID Ven 118 & Ven 34/Donlon Inter. Improvement - 2 WB LT Lanes |  |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |          |      | NB   |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|----------|------|------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH       | RT   | LT   | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>l</sub>           | 1          | 1         | 1     | 2     | 1        | 0    | 0    | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR       |      |      | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 20         | 340       | 10    | 350   | 450      | 10   | 100  | 70    | 490   | 30   | 70    | 30   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20       | 20   | 14   | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00     | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P        | P    | P    | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>s</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3        |      |      | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0      |      |      | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, l                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000    |      |      | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0      |      |      | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 0          |           | 0     | 0     |          |      | 0    | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0     |      |      | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0        | N    | N    | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |          |      |      |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0        |      |      | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2      |      |      | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    | 04    | NS Perm  | 06   | 07   | 08    |       |      |       |      |
| Timing                                    | G = 20.0   | G = 35.0  | G =   | G =   | G = 20.0 | G =  | G =  | G =   |       |      |       |      |

|                                |         |     |     |         |     |                        |     |
|--------------------------------|---------|-----|-----|---------|-----|------------------------|-----|
| Y = 5.5                        | Y = 5.5 | Y = | Y = | Y = 4.5 | Y = | Y =                    | Y = |
| Duration of Analysis, T = 1.00 |         |     |     |         |     | Cycle Length, C = 90.5 |     |

### Lane Group Capacity, Control Delay, and LOS Determination

|                                     | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|-------------------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                                     | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v               | 20    | 340   | 10    | 350          | 460   |    |                  | 170   | 490   |      | 130   |    |
| Lane group capacity, c              | 317   | 583   | 496   | 645          | 610   |    |                  | 264   | 697   |      | 337   |    |
| v/c ratio, X                        | 0.06  | 0.58  | 0.02  | 0.54         | 0.75  |    |                  | 0.64  | 0.70  |      | 0.39  |    |
| Total green ratio, g/C              | 0.22  | 0.39  | 0.39  | 0.22         | 0.39  |    |                  | 0.22  | 0.49  |      | 0.22  |    |
| Uniform delay, d <sub>1</sub>       | 27.8  | 22.0  | 17.2  | 31.2         | 24.0  |    |                  | 32.0  | 17.9  |      | 30.0  |    |
| Progression factor, PF              | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k                | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, d <sub>2</sub>   | 0.4   | 4.3   | 0.1   | 3.3          | 8.9   |    |                  | 12.1  | 6.0   |      | 3.3   |    |
| Initial queue delay, d <sub>3</sub> |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay                       | 28.2  | 26.3  | 17.2  | 34.5         | 32.9  |    |                  | 44.1  | 23.9  |      | 33.4  |    |
| Lane group LOS                      | C     | C     | B     | C            | C     |    |                  | D     | C     |      | C     |    |
| Approach delay                      | 26.1  |       |       | 33.6         |       |    | 29.1             |       |       | 33.4 |       |    |
| Approach LOS                        | C     |       |       | C            |       |    | C                |       |       | C    |       |    |
| Intersection delay                  | 30.7  |       |       | $X_c = 0.73$ |       |    | Intersection LOS |       |       | C    |       |    |

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# HCS2000™ DETAILED REPORT

| General Information                       |             |           |       |       |       | Site Information |  |         |       |      |       |      |     |
|---|-------------|-----------|-------|-------|-------|------------------|--|---------|-------|------|-------|------|-----|
| Analyst                                   | trung duong |           |       |       |       | Intersection     | Ven 118 & Ven<br>34/Donlon Rd                                      |         |       |      |       |      |     |
| Agency or Co.                             | Ventura     |           |       |       |       | Area Type        | All other areas  |         |       |      |       |      |     |
| Date Performed                            | 2/23/2009   |           |       |       |       | Jurisdiction     | Analysis Year 2015 Projection                                      |         |       |      |       |      |     |
| Time Period                               | P.M. Peak   |           |       |       |       | Project ID       | Ven 118 & Ven<br>34/Donlon Inter.<br>Improvement - 1 WB LT<br>Lane |         |       |      |       |      |     |
| Volume and Timing Input                   |             |           |       |       |       |                  |  |         |       |      |       |      |     |
|   | EB          |           |       | WB    |       |                  | NB   |         |       | SB   |       |      |     |
|   | LT          | TH        | RT    | LT    | TH    | RT               | LT   | TH      | RT    | LT   | TH    | RT   |     |
| Number of lanes, N <sub>1</sub>           | 1           | 1         | 1     | 1     | 1     | 0                | 0  | 1       | 1     | 0    | 1     | 0    |     |
| Lane group                                | L           | T         | R     | L     | TR    |                  |  | LT      | R     |      | LTR   |      |     |
| Volume, V (vph)                           | 20          | 340       | 10    | 350   | 450   | 10               | 100  | 70      | 490   | 30   | 70    | 30   |     |
| % Heavy vehicles, %HV                     | 26          | 26        | 26    | 20    | 20    | 20               | 14   | 14      | 14    | 0    | 0     | 0    |     |
| Peak-hour factor, PHF                     | 1.00        | 1.00      | 1.00  | 1.00  | 1.00  | 1.00             | 1.00   | 1.00    | 1.00  | 1.00 | 1.00  | 1.00 |     |
| Pretimed (P) or actuated (A)              | P           | P         | P     | P     | P     | P                | P  | P       | P     | P    | P     | P    |     |
| Start-up lost time, l <sub>1</sub>        | 2.0         | 2.0       | 2.0   | 2.0   | 2.0   |                  |  | 2.0     | 2.0   |      | 2.0   |      |     |
| Extension of effective green, e           | 2.0         | 2.0       | 2.0   | 2.0   | 2.0   |                  |  | 2.0     | 2.0   |      | 2.0   |      |     |
| Arrival type, AT                          | 3           | 3         | 3     | 3     | 3     |                  |  | 3       | 3     |      | 3     |      |     |
| Unit extension, UE                        | 3.0         | 3.0       | 3.0   | 3.0   | 3.0   |                  |  | 3.0     | 3.0   |      | 3.0   |      |     |
| Filtering/metering, I                     | 1.000       | 1.000     | 1.000 | 1.000 | 1.000 |                  |  | 1.000   | 1.000 |      | 1.000 |      |     |
| Initial unmet demand, Q <sub>b</sub>      | 0.0         | 0.0       | 0.0   | 0.0   | 0.0   |                  |  | 0.0     | 0.0   |      | 0.0   |      |     |
| Ped / Bike / RTOR volumes                 | 1           |           | 0     | 0     |       | 0                | 0  |         | 0     | 0    |       | 0    |     |
| Lane width                                | 12.0        | 12.0      | 12.0  | 12.0  | 12.0  |                  |  | 12.0    | 12.0  |      | 12.0  |      |     |
| Parking / Grade / Parking                 | N           | 0         | N     | N     | 0     | N                | N  | 0       | N     | N    | 0     | N    |     |
| Parking maneuvers, N <sub>m</sub>         |             |           |       |       |       |                  |  |         |       |      |       |      |     |
| Buses stopping, N <sub>B</sub>            | 0           | 0         | 0     | 0     | 0     |                  |  | 0       | 0     |      | 0     |      |     |
| Min. time for pedestrians, G <sub>p</sub> |             | 3.2       |       |       | 3.2   |                  |  | 3.2     |       |      | 3.2   |      |     |
| Phasing                                   | Excl. Left  | Thru & RT |       | 03    |       | 04               |  | NS Perm |       | 06   |       | 07   | 08  |
| Timing                                    | G = 25.0    | G = 32.0  | G =   |       | G =   |                  | G = 18.0   |         | G =   |      | G =   |      | G = |

|           |           |       |       |           |       |       |       |
|-----------|-----------|-------|-------|-----------|-------|-------|-------|
| $Y = 5.5$ | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 4.5$ | $Y =$ | $Y =$ | $Y =$ |
|-----------|-----------|-------|-------|-----------|-------|-------|-------|

|                                   |  |  |  |  |                        |  |  |  |
|-----------------------------------|--|--|--|--|------------------------|--|--|--|
| Duration of Analysis, T =<br>1.00 |  |  |  |  | Cycle Length, C = 90.5 |  |  |  |
|-----------------------------------|--|--|--|--|------------------------|--|--|--|

### Lane Group Capacity, Control Delay, and LOS Determination

|                            | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|----------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                            | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v      | 20    | 340   | 10    | 350          | 460   |    |                  | 170   | 490   |      | 130   |    |
| Lane group capacity, c     | 396   | 533   | 453   | 415          | 558   |    |                  | 234   | 744   |      | 276   |    |
| v/c ratio, X               | 0.05  | 0.64  | 0.02  | 0.84         | 0.82  |    |                  | 0.73  | 0.66  |      | 0.47  |    |
| Total green ratio, g/C     | 0.28  | 0.35  | 0.35  | 0.28         | 0.35  |    |                  | 0.20  | 0.52  |      | 0.20  |    |
| Uniform delay, $d_1$       | 24.0  | 24.4  | 19.1  | 30.9         | 26.7  |    |                  | 33.9  | 15.6  |      | 32.0  |    |
| Progression factor, PF     | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k       | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, $d_2$   | 0.2   | 5.9   | 0.1   | 21.7         | 14.5  |    |                  | 19.6  | 4.6   |      | 5.8   |    |
| Initial queue delay, $d_3$ |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay              | 24.3  | 30.3  | 19.1  | 52.6         | 41.2  |    |                  | 53.6  | 20.2  |      | 37.8  |    |
| Lane group LOS             | C     | C     | B     | D            | D     |    |                  | D     | C     |      | D     |    |
| Approach delay             | 29.7  |       |       | 46.1         |       |    | 28.8             |       |       | 37.8 |       |    |
| Approach LOS               | C     |       |       | D            |       |    | C                |       |       | D    |       |    |
| Intersection delay         | 36.7  |       |       | $X_c = 0.81$ |       |    | Intersection LOS |       |       | D    |       |    |

# ROUNDABOUTS - UNSIGNALIZED INTERSECTIONS WORKSHEET

| General Information |             | Site Information |                      |  |
|---------------------|-------------|------------------|----------------------|--|
| Analyst             | trung duong | Intersection     | Ven 118/34/Donlon Rd |  |
| Agency/Co.          | Ventura     | Jurisdiction     |                      |  |
| Date                | 2/23/2009   | Analysis Year    | 2015 Projection      |  |
| Performed           |             |                  |                      |  |
| Time Period         | PM Peak     |                  |                      |  |

Project Description Ven 118 & Ven  
34/Donlon Intersection Improvement

## Volume Adjustments

|            |                     | EB   | WB   | NB   | SB   |
|------------|---------------------|------|------|------|------|
| LT Traffic | Volume, veh/h       | 20   | 390  | 100  | 30   |
|            | PHF                 | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate,<br>veh/h | 20   | 390  | 100  | 30   |
| TH Traffic | Volume, veh/h       | 340  | 450  | 70   | 70   |
|            | PHF                 | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate,<br>veh/h | 340  | 450  | 70   | 70   |
| RT Traffic | Volume, veh/h       | 10   | 10   | 490  | 30   |
|            | PHF                 | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate,<br>veh/h | 10   | 10   | 490  | 30   |

## Approach Flow Computation

| Approach Flow (veh/h) | Va (veh/h) |
|-----------------------|------------|
| Vae                   | 370        |
| Vaw                   | 850        |
| Van                   | 660        |
| Vas                   | 130        |

## Circulating Flow Computation

| Approach Flow (veh/h) | Vc (veh/h) |
|-----------------------|------------|
| Vce                   | 490        |
| Vcw                   | 190        |
| Vcn                   | 390        |
| Vcs                   | 940        |

## Capacity Computation

|           |             | EB   | WB   | NB   | SB   |
|-----------|-------------|------|------|------|------|
| Capacity  | Upper bound | 940  | 1193 | 1018 | 653  |
|           | Lower bound | 761  | 987  | 830  | 509  |
| v/c Ratio | Upper bound | 0.39 | 0.71 | 0.65 | 0.20 |
|           | Lower bound | 0.49 | 0.86 | 0.80 | 0.26 |

# HCS2000™ DETAILED REPORT

| General Information |             |  |  |  |  | Site Information |  |  |  |  |  |
|---------------------|-------------|--|--|--|--|------------------|--|--|--|--|--|
| Analyst             | trung duong |  |  |  |  | Intersection     | Ven 118 (L.A. Ave.) & Ven 34                               |  |  |  |  |
| Agency or Co.       | Ventura     |  |  |  |  | Area Type        | All other areas  |  |  |  |  |
| Date Performed      | 2/23/2009   |  |  |  |  | Jurisdiction     | Analysis Year 2015 Projection                              |  |  |  |  |
| Time Period         | P.M. Peak   |  |  |  |  | Project ID       | Ven 118 & Ven 34/Donlon Inter. - Bypass - Exist. Intersect |  |  |  |  |

## Volume and Timing Input

|   | EB       |           |      | WB    |      |       | NB       |       |       | SB |     |     |
|---|----------|-----------|------|-------|------|-------|----------|-------|-------|----|-----|-----|
|   | LT       | TH        | RT   | LT    | TH   | RT    | LT       | TH    | RT    | LT | TH  | RT  |
| Number of lanes, N <sub>1</sub>           | 0        | 1         | 0    | 0     | 1    | 0     | 1        | 0     | 1     | 0  | 0   | 0   |
| Lane group                                |          | TR        |      |       | LT   |       | L        |       | R     |    |     |     |
| Volume, V (vph)                           | 360      | 10        | 0    | 450   |      | 100   |          | 0     |       |    |     |     |
| % Heavy vehicles, %HV                     | 26       | 26        | 20   | 20    |      | 14    |          | 14    |       |    |     |     |
| Peak-hour factor, PHF                     | 1.00     | 1.00      | 1.00 | 1.00  |      | 1.00  |          | 1.00  |       |    |     |     |
| Pretimed (P) or actuated (A)              | P        | P         | P    | P     |      | P     |          | P     |       |    |     |     |
| Start-up lost time, l <sub>1</sub>        | 2.0      |           |      | 2.0   |      | 2.0   |          | 2.0   |       |    |     |     |
| Extension of effective green, e           | 2.0      |           |      | 2.0   |      | 2.0   |          | 2.0   |       |    |     |     |
| Arrival type, AT                          | 3        |           |      | 3     |      | 3     |          | 3     |       |    |     |     |
| Unit extension, UE                        | 3.0      |           |      | 3.0   |      | 3.0   |          | 3.0   |       |    |     |     |
| Filtering/metering, l                     | 1.000    |           |      | 1.000 |      | 1.000 | 1.000    | 1.000 | 1.000 |    |     |     |
| Initial unmet demand, Q <sub>b</sub>      | 0.0      |           |      | 0.0   |      | 0.0   |          | 0.0   |       |    |     |     |
| Ped / Bike / RTOR volumes                 | 1        |           | 0    |       |      |       | 0        |       | 0     | 0  |     |     |
| Lane width                                |          | 12.0      |      |       | 12.0 |       | 12.0     |       | 12.0  |    |     |     |
| Parking / Grade / Parking                 | N        | 0         | N    | N     | 0    | N     | N        | 0     | N     | N  |     | N   |
| Parking maneuvers, N <sub>m</sub>         |          |           |      |       |      |       |          |       |       |    |     |     |
| Buses stopping, N <sub>B</sub>            | 0        |           |      | 0     |      | 0     |          | 0     |       |    |     |     |
| Min. time for pedestrians, t <sub>p</sub> |          | 3.2       |      |       |      |       | 3.2      |       | 3.2   |    |     |     |
| Phasing                                   | WB Only  | Thru & RT |      | 03    |      | 04    | NB Only  |       | 06    |    | 07  | 08  |
| Timing                                    | G = 30.0 | G = 30.0  |      | G =   |      | G =   | G = 15.0 |       | G =   |    | G = | G = |

|                                |           |       |       |         |       |                        |       |
|--------------------------------|-----------|-------|-------|---------|-------|------------------------|-------|
| $Y = 5.5$                      | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 5$ | $Y =$ | $Y =$                  | $Y =$ |
| Duration of Analysis, T = 1.00 |           |       |       |         |       | Cycle Length, C = 91.0 |       |

### Lane Group Capacity, Control Delay, and LOS Determination

|                                     | EB |       |    | WB |              |    | NB               |    |       | SB |    |    |
|-------------------------------------|----|-------|----|----|--------------|----|------------------|----|-------|----|----|----|
|                                     | LT | TH    | RT | LT | TH           | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |    | 370   |    |    | 450          |    | 100              |    | 0     |    |    |    |
| Lane group capacity, c              |    | 495   |    |    | 1139         |    | 261              |    | 779   |    |    |    |
| v/c ratio, X                        |    | 0.75  |    |    | 0.40         |    | 0.38             |    | 0.00  |    |    |    |
| Total green ratio, g/C              |    | 0.33  |    |    | 0.72         |    | 0.16             |    | 0.55  |    |    |    |
| Uniform delay, d <sub>1</sub>       |    | 27.1  |    |    | 5.0          |    | 33.9             |    | 9.2   |    |    |    |
| Progression factor, PF              |    | 1.000 |    |    | 1.000        |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |    | 0.50  |    |    | 0.50         |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |    | 10.5  |    |    | 1.0          |    | 4.3              |    | 0.0   |    |    |    |
| Initial queue delay, d <sub>3</sub> |    |       |    |    |              |    |                  |    |       |    |    |    |
| Control delay                       |    | 37.7  |    |    | 6.0          |    | 38.1             |    | 9.2   |    |    |    |
| Lane group LOS                      |    | D     |    |    | A            |    | D                |    | A     |    |    |    |
| Approach delay                      |    | 37.7  |    |    | 6.0          |    | 38.1             |    |       |    |    |    |
| Approach LOS                        |    | D     |    |    | A            |    | D                |    |       |    |    |    |
| Intersection delay                  |    | 22.2  |    |    | $X_c = 0.39$ |    | Intersection LOS |    | C     |    |    |    |

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## HCS2000™ DETAILED REPORT

| General Information    |  |  |  |  |  | Site Information                           |  |  |  |  |  |
|------------------------|--|--|--|--|--|--|--|--|--|--|--|
| Analyst trung duong    |  |  |  |  |  | Intersection Ven 118 & Bypass St           |  |  |  |  |  |
| Agency or Co.          |  |  |  |  |  | Area Type All other areas                  |  |  |  |  |  |
| Date Performed 2/24/09 |  |  |  |  |  | Jurisdiction Analysis Year 2015 Projection |  |  |  |  |  |
| Time Period P.M. Peak  |  |  |  |  |  | Ven 118 & Ven Project ID 34/Donlon Improv- |  |  |  |  |  |
|                        |  |  |  |  |  | Bypass-East Intersect                      |  |  |  |  |  |

## Volume and Timing Input

|   | EB    |       |       | WB    |      |    | NB    |       |       | SB  |    |    |
|---|-------|-------|-------|-------|------|----|-------|-------|-------|-----|----|----|
|   | LT    | TH    | RT    | LT    | TH   | RT | LT    | TH    | RT    | LT  | TH | RT |
| Number of lanes, N <sub>l</sub>           | 0     | 1     | 1     | 2     | 1    | 0  | 1     | 0     | 1     | 0   | 0  | 0  |
| Lane group                                |       | T     | R     | L     | T    |    | L     |       | R     |     |    |    |
| Volume, V (vph)                           | 370   | 0     | 350   | 460   |      |    | 0     |       | 490   |     |    |    |
| % Heavy vehicles, %HV                     | 26    | 26    | 20    | 20    |      |    | 14    |       | 14    |     |    |    |
| Peak-hour factor, PHF                     | 1.00  | 1.00  | 1.00  | 1.00  |      |    | 1.00  |       | 1.00  |     |    |    |
| Pretimed (P) or actuated (A)              | P     | P     | P     | P     |      |    | P     |       | P     |     |    |    |
| Start-up lost time, l <sub>1</sub>        | 2.0   | 2.0   | 2.0   | 2.0   |      |    | 2.0   |       | 2.0   |     |    |    |
| Extension of effective green, e           | 2.0   | 2.0   | 2.0   | 2.0   |      |    | 2.0   |       | 2.0   |     |    |    |
| Arrival type, AT                          | 3     | 3     | 3     | 3     |      |    | 3     |       | 3     |     |    |    |
| Unit extension, UE                        | 3.0   | 3.0   | 3.0   | 3.0   |      |    | 3.0   |       | 3.0   |     |    |    |
| Filtering/metering, I                     | 1.000 | 1.000 | 1.000 | 1.000 |      |    | 1.000 | 1.000 | 1.000 |     |    |    |
| Initial unmet demand, Q <sub>b</sub>      | 0.0   | 0.0   | 0.0   | 0.0   |      |    | 0.0   |       | 0.0   |     |    |    |
| Ped / Bike / RTOR volumes                 | 1     |       | 0     |       |      |    | 0     |       | 0     | 0   |    |    |
| Lane width                                |       | 12.0  | 12.0  | 12.0  | 12.0 |    | 12.0  |       | 12.0  |     |    |    |
| Parking / Grade / Parking                 | N     | 0     | N     | N     | 0    | N  | N     | 0     | N     | N   |    | N  |
| Parking maneuvers, N <sub>m</sub>         |       |       |       |       |      |    |       |       |       |     |    |    |
| Buses stopping, N <sub>B</sub>            |       | 0     | 0     | 0     | 0    |    | 0     |       | 0     |     |    |    |
| Min. time for pedestrians, G <sub>p</sub> |       | 3.2   |       |       |      |    | 3.2   |       |       | 3.2 |    |    |

| Phasing  | WB Only  | EB Only | 03  | 04       | NB Only | 06  | 07  | 08  |
|----------|----------|---------|-----|----------|---------|-----|-----|-----|
| G = 40.0 | G = 32.0 | G =     | G = | G = 18.0 | G =     | G = | G = | G = |
| Y = 6.5  | Y = 6.5  | Y =     | Y = | Y = 5.5  | Y =     | Y = | Y = | Y = |

Duration of Analysis, T =

Cycle Length, C = 108.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB   |       |       | WB           |       |    | NB               |    |       | SB |    |    |
|-------------------------------------|------|-------|-------|--------------|-------|----|------------------|----|-------|----|----|----|
|                                     | LT   | TH    | RT    | LT           | TH    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |      | 370   | 0     | 350          | 460   |    | 0                |    | 490   |    |    |    |
| Lane group capacity, c              |      | 445   | 378   | 1076         | 584   |    | 263              |    | 829   |    |    |    |
| v/c ratio, X                        |      | 0.83  | 0.00  | 0.33         | 0.79  |    | 0.00             |    | 0.59  |    |    |    |
| Total green ratio, g/C              |      | 0.29  | 0.29  | 0.37         | 0.37  |    | 0.17             |    | 0.59  |    |    |    |
| Uniform delay, d <sub>1</sub>       |      | 35.7  | 27.0  | 24.6         | 30.5  |    | 37.7             |    | 14.3  |    |    |    |
| Progression factor, PF              |      | 1.000 | 1.000 | 1.000        | 1.000 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |      | 0.50  | 0.50  | 0.50         | 0.50  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |      | 18.8  | 0.0   | 0.8          | 11.1  |    | 0.0              |    | 3.1   |    |    |    |
| Initial queue delay, d <sub>3</sub> |      |       |       |              |       |    |                  |    |       |    |    |    |
| Control delay                       |      | 54.5  | 27.0  | 25.4         | 41.6  |    | 37.7             |    | 17.4  |    |    |    |
| Lane group LOS                      |      | D     | C     | C            | D     |    | D                |    | B     |    |    |    |
| Approach delay                      | 54.5 |       |       | 34.6         |       |    | 17.4             |    |       |    |    |    |
| Approach LOS                        | D    |       |       | C            |       |    | B                |    |       |    |    |    |
| Intersection delay                  | 34.0 |       |       | $X_c = 0.67$ |       |    | Intersection LOS |    |       | C  |    |    |

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# HCS2000™ DETAILED REPORT

| General Information |             |  |  |  |  | Site Information |   |  |  |  |  |
|---------------------|-------------|--|--|--|--|------------------|---|--|--|--|--|
| Analyst             | trung duong |  |  |  |  | Intersection     | Ven 34 (Somis RD)& Bypass St                          |  |  |  |  |
| Agency or Co.       | Ventura     |  |  |  |  | Area Type        | All other areas                                       |  |  |  |  |
| Date Performed      | 2/24/09     |  |  |  |  | Jurisdiction     | Analysis Year 2015 Projection                         |  |  |  |  |
| Time Period         | P.M. Peak   |  |  |  |  | Project ID       | Ven 118 & Ven 34/Donlon Improv-Bypass-South Intersect |  |  |  |  |

## Volume and Timing Input

|   | EB       |     |     | WB    |       |          | NB    |       |      | SB    |      |    |
|---|----------|-----|-----|-------|-------|----------|-------|-------|------|-------|------|----|
|   | LT       | TH  | RT  | LT    | TH    | RT       | LT    | TH    | RT   | LT    | TH   | RT |
| Number of lanes, N <sub>1</sub>           | 0        | 0   | 0   | 1     | 0     | 1        | 0     | 1     | 1    | 0     | 1    | 0  |
| Lane group                                |          |     |     | L     |       | R        | T     | R     |      | LT    |      |    |
| Volume, V (vph)                           |          |     |     | 350   |       | 0        | 170   | 490   | 0    | 90    |      |    |
| % Heavy vehicles, %HV                     |          |     |     | 20    |       | 0        | 0     | 14    | 0    | 0     |      |    |
| Peak-hour factor, PHF                     |          |     |     | 1.00  |       | 1.00     | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |    |
| Pretimed (P) or actuated A)               |          |     |     | P     |       | P        | P     | P     | A    | P     |      |    |
| Start-up lost time, l <sub>1</sub>        |          |     |     | 2.0   |       | 2.0      | 2.0   | 2.0   | 2.0  |       | 2.0  |    |
| Extension of effective green, e           |          |     |     | 2.0   |       | 2.0      | 2.0   | 2.0   | 2.0  |       | 2.0  |    |
| Arrival type, AT                          |          |     |     | 3     |       | 3        | 3     | 3     |      | 3     |      |    |
| Unit extension, UE                        |          |     |     | 3.0   |       | 3.0      | 3.0   | 3.0   |      | 3.0   |      |    |
| Filtering/metering, l                     |          |     |     | 1.000 | 1.000 | 1.000    | 1.000 | 1.000 |      | 1.000 |      |    |
| Initial unmet demand, Q <sub>b</sub>      |          |     |     | 0.0   |       | 0.0      | 0.0   | 0.0   |      | 0.0   |      |    |
| Ped / Bike / RTOR volumes                 | 1        |     |     | 0     |       | 0        | 0     | 0     |      | 0     |      |    |
| Lane width                                |          |     |     | 12.0  |       | 12.0     | 12.0  | 12.0  |      | 12.0  |      |    |
| Parking / Grade / Parking                 | N        |     | N   | N     | 0     | N        | N     | 0     | N    | N     | 0    | N  |
| Parking maneuvers, N <sub>m</sub>         |          |     |     |       |       |          |       |       |      |       |      |    |
| Buses stopping, N <sub>B</sub>            |          |     |     | 0     |       | 0        | 0     | 0     |      | 0     |      |    |
| Min. time for pedestrians, t <sub>p</sub> |          |     | 3.2 |       |       | 3.2      |       |       | 3.2  |       |      |    |
| Phasing                                   | WB Only  | 02  | 03  | 04    |       | NS Perm  | 06    |       | 07   |       | 08   |    |
| Timing                                    | G = 55.0 | G = | G = | G =   |       | G = 50.0 | G =   |       | G =  |       | G =  |    |
|   | Y = 5.5  | Y = | Y = | Y =   |       | Y = 5    | Y =   |       | Y =  |       | Y =  |    |

Duration of Analysis, T =

Cycle Length, C = 115.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB   |    |    | WB                    |    |       | NB |                  |       | SB |       |    |
|-------------------------------------|------|----|----|-----------------------|----|-------|----|------------------|-------|----|-------|----|
|                                     | LT   | TH | RT | LT                    | TH | RT    | LT | TH               | RT    | LT | TH    | RT |
| Adjusted flow rate, v               |      |    |    | 350                   |    | 0     |    | 170              | 490   |    | 90    |    |
| Lane group capacity, c              |      |    |    | 716                   |    | 769   |    | 823              | 1417  |    | 823   |    |
| v/c ratio, X                        |      |    |    | 0.49                  |    | 0.00  |    | 0.21             | 0.35  |    | 0.11  |    |
| Total green ratio, g/C              |      |    |    | 0.48                  |    | 0.48  |    | 0.43             | 1.00  |    | 0.43  |    |
| Uniform delay, d <sub>1</sub>       |      |    |    | 20.7                  |    | 15.8  |    | 20.4             | 0.0   |    | 19.5  |    |
| Progression factor, PF              |      |    |    | 1.000                 |    | 1.000 |    | 1.000            | 0.950 |    | 1.000 |    |
| Delay calibration, k                |      |    |    | 0.50                  |    | 0.50  |    | 0.50             | 0.50  |    | 0.50  |    |
| Incremental delay, d <sub>2</sub>   |      |    |    | 2.4                   |    | 0.0   |    | 0.6              | 0.7   |    | 0.3   |    |
| Initial queue delay, d <sub>3</sub> |      |    |    |                       |    |       |    |                  |       |    |       |    |
| Control delay                       |      |    |    | 23.1                  |    | 15.8  |    | 21.0             | 0.7   |    | 19.8  |    |
| Lane group LOS                      |      |    |    | C                     |    | B     |    | C                | A     |    | B     |    |
| Approach delay                      |      |    |    | 23.1                  |    |       |    | 5.9              |       |    | 19.8  |    |
| Approach LOS                        |      |    |    | C                     |    |       |    | A                |       |    | B     |    |
| Intersection delay                  | 12.5 |    |    | X <sub>c</sub> = 0.35 |    |       |    | Intersection LOS |       |    | B     |    |

## HCS2000™ DETAILED REPORT

| General Information   |  |  |  |  |  | Site Information   |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|
| Analyst trung duong   |  |  |  |  |  | Intersection Ven 118 & Ven 34/Donlon Rd                            |  |  |  |  |  |
| Agency or Co. Ventura |  |  |  |  |  | Area Type All other areas  |  |  |  |  |  |
| Date 6/9/2009         |  |  |  |  |  | Jurisdiction Analysis Year 2015 Projection                         |  |  |  |  |  |
| Performed P.M. Peak   |  |  |  |  |  | Project ID Ven 118 & Ven 34/Donlon Inter. Improvement - Bridge Alt |  |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |          |      | NB   |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|----------|------|------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH       | RT   | LT   | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>l</sub>           | 1          | 1         | 1     | 2     | 1        | 0    | 0    | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR       |      |      | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 20         | 340       | 10    | 350   | 450      | 10   | 100  | 70    | 490   | 30   | 70    | 30   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20       | 20   | 14   | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00     | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P        | P    | P    | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>s</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3        |      |      | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0      |      |      | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, l                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000    |      |      | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0      |      |      | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 0          |           | 0     | 0     |          |      | 0    | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0     |      |      | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0        | N    | N    | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |          |      |      |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0        |      |      | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2      |      |      | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    | 04    | NS Perm  |      | 06   | 07    | 08    |      |       |      |
| Timing                                    | G = 20.0   | G = 35.0  | G =   | G =   | G = 20.0 |      | G =  | G =   | G =   |      |       |      |

|           |           |       |       |           |       |       |       |
|-----------|-----------|-------|-------|-----------|-------|-------|-------|
| $Y = 5.5$ | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 4.5$ | $Y =$ | $Y =$ | $Y =$ |
|-----------|-----------|-------|-------|-----------|-------|-------|-------|

|                                   |  |  |  |  |  |  |                        |
|-----------------------------------|--|--|--|--|--|--|------------------------|
| Duration of Analysis, T =<br>1.00 |  |  |  |  |  |  | Cycle Length, C = 90.5 |
|-----------------------------------|--|--|--|--|--|--|------------------------|

### Lane Group Capacity, Control Delay, and LOS Determination

|                            | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|----------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                            | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v      | 20    | 340   | 10    | 350          | 460   |    |                  | 170   | 490   |      | 130   |    |
| Lane group capacity, c     | 317   | 583   | 496   | 645          | 610   |    |                  | 264   | 697   |      | 337   |    |
| v/c ratio, X               | 0.06  | 0.58  | 0.02  | 0.54         | 0.75  |    |                  | 0.64  | 0.70  |      | 0.39  |    |
| Total green ratio, g/C     | 0.22  | 0.39  | 0.39  | 0.22         | 0.39  |    |                  | 0.22  | 0.49  |      | 0.22  |    |
| Uniform delay, $d_1$       | 27.8  | 22.0  | 17.2  | 31.2         | 24.0  |    |                  | 32.0  | 17.9  |      | 30.0  |    |
| Progression factor, PF     | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k       | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, $d_2$   | 0.4   | 4.3   | 0.1   | 3.3          | 8.9   |    |                  | 12.1  | 6.0   |      | 3.3   |    |
| Initial queue delay, $d_3$ |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay              | 28.2  | 26.3  | 17.2  | 34.5         | 32.9  |    |                  | 44.1  | 23.9  |      | 33.4  |    |
| Lane group LOS             | C     | C     | B     | C            | C     |    |                  | D     | C     |      | C     |    |
| Approach delay             | 26.1  |       |       | 33.6         |       |    | 29.1             |       |       | 33.4 |       |    |
| Approach LOS               | C     |       |       | C            |       |    | C                |       |       | C    |       |    |
| Intersection delay         | 30.7  |       |       | $X_c = 0.73$ |       |    | Intersection LOS |       |       | C    |       |    |

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Version 4.1d

## HCS2000™ DETAILED REPORT

| General Information   |  |  |  |  |  | Site Information   |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|
| Analyst trung duong   |  |  |  |  |  | Intersection Ven 118 (L.A. Ave.) & Ven 34                            |  |  |  |  |  |
| Agency or Co. Ventura |  |  |  |  |  | Area Type All other areas  |  |  |  |  |  |
| Date 8/11/2009        |  |  |  |  |  | Jurisdiction Analysis Year 2035 Projection                           |  |  |  |  |  |
| Performed P.M. Peak   |  |  |  |  |  | Project ID Ven 118 & Ven 34/Donlon Inter. Improvement - Exist. Align |  |  |  |  |  |

## Volume and Timing Input

|   | EB        |          |      | WB    |          |     | NB    |       |       | SB  |    |    |
|---|-----------|----------|------|-------|----------|-----|-------|-------|-------|-----|----|----|
|   | LT        | TH       | RT   | LT    | TH       | RT  | LT    | TH    | RT    | LT  | TH | RT |
| Number of lanes, N <sub>1</sub>           | 0         | 1        | 0    | 0     | 1        | 0   | 1     | 0     | 1     | 0   | 0  | 0  |
| Lane group                                |           | TR       |      |       | LT       |     | L     |       | R     |     |    |    |
| Volume, V (vph)                           | 410       | 10       | 480  | 510   |          |     | 120   |       | 630   |     |    |    |
| % Heavy vehicles, %HV                     | 26        | 26       | 20   | 20    |          |     | 14    |       | 14    |     |    |    |
| Peak-hour factor, PHF                     | 1.00      | 1.00     | 1.00 | 1.00  |          |     | 1.00  |       | 1.00  |     |    |    |
| Pretimed (P) or actuated (A)              | P         | P        | P    | P     |          |     | P     |       | P     |     |    |    |
| Start-up lost time, l <sub>1</sub>        | 2.0       |          |      | 2.0   |          |     | 2.0   |       | 2.0   |     |    |    |
| Extension of effective green, e           | 2.0       |          |      | 2.0   |          |     | 2.0   |       | 2.0   |     |    |    |
| Arrival type, AT                          | 3         |          |      | 3     |          |     | 3     |       | 3     |     |    |    |
| Unit extension, UE                        | 3.0       |          |      | 3.0   |          |     | 3.0   |       | 3.0   |     |    |    |
| Filtering/metering, l                     | 1.000     |          |      | 1.000 |          |     | 1.000 | 1.000 | 1.000 |     |    |    |
| Initial unmet demand, Q <sub>b</sub>      | 0.0       |          |      | 0.0   |          |     | 0.0   |       | 0.0   |     |    |    |
| Ped / Bike / RTOR volumes                 | 1         | 0        |      |       |          |     | 0     |       | 0     | 0   |    |    |
| Lane width                                | 12.0      |          |      | 12.0  |          |     | 12.0  |       | 12.0  |     |    |    |
| Parking / Grade / Parking                 | N         | 0        | ,N   | N     | 0        | N   | N     | 0     | N     | N   |    | N  |
| Parking maneuvers, N <sub>m</sub>         |           |          |      |       |          |     |       |       |       |     |    |    |
| Buses stopping, N <sub>B</sub>            | 0         |          |      | 0     |          |     | 0     |       | 0     |     |    |    |
| Min. time for pedestrians, G <sub>p</sub> |           | 3.2      |      |       |          |     |       | 3.2   |       | 3.2 |    |    |
| Phasing                                   | WB Only   | EB Only  | 03   | 04    | NB Only  | 06  | 07    | 08    |       |     |    |    |
| Timing                                    | G = 110.0 | G = 75.0 | G =  | G =   | G = 20.0 | G = | G =   | G =   |       |     |    |    |
|   | Y = 6.5   | Y = 6.5  | Y =  | Y =   | Y = 5.5  | Y = | Y =   | Y =   |       |     |    |    |

Detailed Report

Duration of Analysis, T =  
1.00

Cycle Length, C = 223.5

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB |       |    | WB |                       |    | NB               |    |       | SB |    |    |
|-------------------------------------|----|-------|----|----|-----------------------|----|------------------|----|-------|----|----|----|
|                                     | LT | TH    | RT | LT | TH                    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |    | 420   |    |    | 990                   |    | 120              |    | 630   |    |    |    |
| Lane group capacity, c              |    | 504   |    |    | 761                   |    | 142              |    | 859   |    |    |    |
| v/c ratio, X                        |    | 0.83  |    |    | 1.30                  |    | 0.85             |    | 0.73  |    |    |    |
| Total green ratio, g/C              |    | 0.34  |    |    | 0.49                  |    | 0.09             |    | 0.61  |    |    |    |
| Uniform delay, d <sub>1</sub>       |    | 68.5  |    |    | 56.8                  |    | 100.2            |    | 31.2  |    |    |    |
| Progression factor, PF              |    | 1.000 |    |    | 1.000                 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |    | 0.50  |    |    | 0.50                  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |    | 16.9  |    |    | 551.7                 |    | 57.3             |    | 5.7   |    |    |    |
| Initial queue delay, d <sub>3</sub> |    |       |    |    |                       |    |                  |    |       |    |    |    |
| Control delay                       |    | 85.4  |    |    | 608.4                 |    | 157.6            |    | 36.9  |    |    |    |
| Lane group LOS                      |    | F     |    |    | F                     |    | F                |    | D     |    |    |    |
| Approach delay                      |    | 85.4  |    |    | 608.4                 |    | 56.2             |    |       |    |    |    |
| Approach LOS                        |    | F     |    |    | F                     |    | E                |    |       |    |    |    |
| Intersection delay                  |    | 315.0 |    |    | X <sub>c</sub> = 1.09 |    | Intersection LOS |    | F     |    |    |    |

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## HCS2000™ DETAILED REPORT

| General Information     |  |  |  |  |  | Site Information  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|---|--|--|--|--|--|
| Analyst trung duong     |  |  |  |  |  | Intersection Ven 118 & Ven 34/Donlon Rd                               |  |  |  |  |  |
| Agency or Co. Ventura   |  |  |  |  |  | Area Type All other areas   |  |  |  |  |  |
| Date Performed 2/1/2009 |  |  |  |  |  | Jurisdiction Analysis Year 2035 Projection                            |  |  |  |  |  |
| Time Period P.M. Peak   |  |  |  |  |  | Project ID Ven 118 & Ven 34/Donlon Inter. Improvement - 2 WB LT Lanes |  |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |       |      | NB       |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|-------|------|----------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH    | RT   | LT       | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>l</sub>           | 1          | 1         | 1     | 2     | 1     | 0    | 0        | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR    |      |          | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 30         | 380       | 10    | 400   | 510   | 10   | 120      | 70    | 550   | 30   | 80    | 40   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20    | 20   | 14       | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00  | 1.00 | 1.00     | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P     | P    | P        | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>1</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |      |          | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |      |          | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3     |      |          | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0   |      |          | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, I                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000 |      |          | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0   |      |          | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 0          |           | 0     | 0     |       |      | 0        | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0  |      |          | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0     | N    | N        | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |       |      |          |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0     |      |          | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2   |      |          | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT |       | 03    | 04    |      | NS Perm  |       | 06    |      | 07    | 08   |
| Timing                                    | G = 17.0   | G = 35.0  |       | G =   | G =   |      | G = 24.0 |       | G =   |      | G =   | G =  |

|                                |           |       |       |           |       |                        |       |
|--------------------------------|-----------|-------|-------|-----------|-------|------------------------|-------|
| $Y = 5.5$                      | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 4.5$ | $Y =$ | $Y =$                  | $Y =$ |
| Duration of Analysis, T = 1.00 |           |       |       |           |       | Cycle Length, C = 91.5 |       |

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB    |       |       | WB           |       |    | NB               |       |    | SB    |    |    |
|-------------------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|----|-------|----|----|
|                                     | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT | LT    | TH | RT |
| Adjusted flow rate, v               | 30    | 380   | 10    | 400          | 520   | ~  | 190              | 550   | ~  | 150   | ~  | ~  |
| Lane group capacity, c              | 266   | 577   | 490   | 542          | 604   | ~  | 299              | 705   | ~  | 435   | ~  | ~  |
| v/c ratio, X                        | 0.11  | 0.66  | 0.02  | 0.74         | 0.86  | ~  | 0.64             | 0.78  | ~  | 0.34  | ~  | ~  |
| Total green ratio, g/C              | 0.19  | 0.38  | 0.38  | 0.19         | 0.38  | ~  | 0.26             | 0.50  | ~  | 0.26  | ~  | ~  |
| Uniform delay, d <sub>1</sub>       | 31.0  | 23.3  | 17.6  | 35.1         | 26.0  | ~  | 29.9             | 18.9  | ~  | 27.4  | ~  | ~  |
| Progression factor, PF              | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 | ~  | 1.000            | 1.000 | ~  | 1.000 | ~  | ~  |
| Delay calibration, k                | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  | ~  | 0.50             | 0.50  | ~  | 0.50  | ~  | ~  |
| Incremental delay, d <sub>2</sub>   | 0.9   | 6.0   | 0.1   | 9.2          | 17.3  | ~  | 10.3             | 8.9   | ~  | 2.2   | ~  | ~  |
| Initial queue delay, d <sub>3</sub> |       |       |       |              |       |    |                  |       |    |       |    |    |
| Control delay                       | 31.8  | 29.3  | 17.7  | 44.3         | 43.3  | ~  | 40.2             | 27.8  | ~  | 29.5  | ~  | ~  |
| Lane group LOS                      | C     | C     | B     | D            | D     | ~  | D                | C     | ~  | C     | ~  | ~  |
| Approach delay                      | 29.2  |       |       | 43.7         |       |    | 31.0             |       |    | 29.5  |    |    |
| Approach LOS                        | C     |       |       | D            |       |    | C                |       |    | C     |    |    |
| Intersection delay                  | 35.8  |       |       | $X_c = 0.82$ |       |    | Intersection LOS |       |    | D     |    |    |

## HCS2000™ DETAILED REPORT

| General Information   |  |  |  |  |  | Site Information   |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|
| Analyst trung duong   |  |  |  |  |  | Intersection Ven 118 & Ven 34/Donlon Rd                              |  |  |  |  |  |
| Agency or Co. Ventura |  |  |  |  |  | Area Type All other areas  |  |  |  |  |  |
| Date 2/1/2009         |  |  |  |  |  | Jurisdiction Analysis Year 2035 Projection                           |  |  |  |  |  |
| Performed P.M. Peak   |  |  |  |  |  | Project ID Ven 118 & Ven 34/Donlon Inter. Improvement - 1 WB LT Lane |  |  |  |  |  |

## Volume and Timing Input

|   | EB         |           |       | WB    |          |      | NB   |       |       | SB   |       |      |
|---|------------|-----------|-------|-------|----------|------|------|-------|-------|------|-------|------|
|   | LT         | TH        | RT    | LT    | TH       | RT   | LT   | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>l</sub>           | 1          | 1         | 1     | 1     | 1        | 0    | 0    | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR       |      |      | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 30         | 350       | 10    | 400   | 510      | 10   | 120  | 70    | 550   | 30   | 80    | 40   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20       | 20   | 14   | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00     | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P        | P    | P    | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>1</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0      |      |      | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3        |      |      | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0      |      |      | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, l                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000    |      |      | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0      |      |      | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 1          |           | 0     | 0     |          |      | 0    | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0     |      |      | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0        | N    | N    | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |          |      |      |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0        |      |      | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2      |      |      | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    | 04    | NS Perm  |      | 06   | 07    | 08    |      |       |      |
| Timing                                    | G = 26.0   | G = 32.0  | G =   | G =   | G = 18.0 |      | G =  | G =   | G =   |      |       |      |

|  | Y = 5.5 | Y = 5.5 | Y =   | Y =                   | Y = 4.5 | Y =                    | Y =              | Y =   |       |  |  |
|--|---------|---------|-------|-----------------------|---------|------------------------|------------------|-------|-------|--|--|
| Duration of Analysis, T =  |         |         |       |                       |         | Cycle Length, C = 91.5 |                  |       |       |  |  |
| 1.00   |         |         |       |                       |         |                        |                  |       |       |  |  |
| <i>Lane Group Capacity, Control Delay, and LOS Determination</i> |         |         |       |                       |         |                        |                  |       |       |  |  |
|  | EB      |         |       | WB                    |         |                        | NB               |       |       |  |  |
|  | LT      | TH      | RT    | LT                    | TH      | RT                     | LT               | TH    | RT    |  |  |
| Adjusted flow rate, v  | 30      | 350     | 10    | 400                   | 520     |                        | 190              | 550   | 150   |  |  |
| Lane group capacity, c   | 407     | 527     | 448   | 427                   | 552     |                        | 212              | 751   | 252   |  |  |
| v/c ratio, X   | 0.07    | 0.66    | 0.02  | 0.94                  | 0.94    |                        | 0.90             | 0.73  | 0.60  |  |  |
| Total green ratio, g/C   | 0.28    | 0.35    | 0.35  | 0.28                  | 0.35    |                        | 0.20             | 0.53  | 0.20  |  |  |
| Uniform delay, d <sub>1</sub>                                    | 23.9    | 25.2    | 19.5  | 31.9                  | 28.9    |                        | 35.8             | 16.5  | 33.4  |  |  |
| Progression factor, PF   | 1.000   | 1.000   | 1.000 | 1.000                 | 1.000   |                        | 1.000            | 1.000 | 1.000 |  |  |
| Delay calibration, k   | 0.50    | 0.50    | 0.50  | 0.50                  | 0.50    |                        | 0.50             | 0.50  | 0.50  |  |  |
| Incremental delay, d <sub>2</sub>                                | 0.4     | 6.7     | 0.1   | 44.8                  | 38.7    |                        | 56.3             | 6.5   | 10.4  |  |  |
| Initial queue delay, d <sub>3</sub>                              |         |         |       |                       |         |                        |                  |       |       |  |  |
| Control delay  | 24.3    | 31.9    | 19.6  | 76.8                  | 67.5    |                        | 92.2             | 23.0  | 43.8  |  |  |
| Lane group LOS   | C       | C       | B     | E                     | E       |                        | F                | C     | D     |  |  |
| Approach delay   | 31.0    |         |       | 71.5                  |         |                        | 40.8             |       |       |  |  |
| Approach LOS   | C       |         |       | E                     |         |                        | D                |       |       |  |  |
| Intersection delay   | 52.1    |         |       | X <sub>c</sub> = 0.93 |         |                        | Intersection LOS |       |       |  |  |

## **ROUNDABOUTS - UNSIGNALIZED INTERSECTIONS WORKSHEET**

| General Information |                    | Site Information |                             |
|---------------------|--------------------|------------------|-----------------------------|
| Analyst             | <i>trung duong</i> | Intersection     | <i>Ven 118/34/Donlon Rd</i> |
| Agency/Co.          | <i>Ventura</i>     | Jurisdiction     |                             |
| Date                | <i>2/10/09</i>     | Analysis Year    | <i>2035 Projection</i>      |
| Performed           |                    |                  |                             |
| Time Period         | <i>P.M. Peak</i>   |                  |                             |

## Project Description - Ven 118 & Ven 34/Donlon Intersection Improvement

## Volume Adjustments

|            |                     | EB   | WB   | NB   | SB   |
|------------|---------------------|------|------|------|------|
| -T Traffic | Volume, veh/h       | 30   | 400  | 120  | 30   |
|            | PHF                 | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate,<br>veh/h | 30   | 400  | 120  | 30   |
| TH Traffic | Volume, veh/h       | 380  | 510  | 70   | 80   |
|            | PHF                 | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate,<br>veh/h | 380  | 510  | 70   | 80   |
| RT Traffic | Volume, veh/h       | 10   | 10   | 550  | 40   |
|            | PHF                 | 1.00 | 1.00 | 1.00 | 1.00 |
|            | Flow rate,<br>veh/h | 10   | 10   | 550  | 40   |

### Approach Flow Computation

| Approach Flow (veh/h) | Va (veh/h) |
|-----------------------|------------|
| Vae                   | 420        |
| Vaw                   | 920        |
| Van                   | 740        |
| Vas                   | 150        |

## Circulating Flow Computation

| Approach Flow (veh/h) | Vc (veh/h) |
|-----------------------|------------|
| Vce                   | 510        |
| Vcw                   | 220        |
| Vcn                   | 440        |
| Vcs                   | 1030       |

## Capacity Computation

|           |             | EB   | WB   | NB   | SB   |
|-----------|-------------|------|------|------|------|
| Capacity  | Upper bound | 925  | 1165 | 979  | 607  |
|           | Lower bound | 747  | 962  | 795  | 469  |
| v/c Ratio | Upper bound | 0.45 | 0.79 | 0.76 | 0.25 |
|           | Lower bound | 0.56 | 0.96 | 0.93 | 0.32 |

**HCS2000™ DETAILED REPORT**

| General Information   |  |  |  |  |  | Site Information   |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|
| Analyst trung duong   |  |  |  |  |  | Intersection Ven 118 (L.A. Ave.) & Ven 34                              |  |  |  |  |  |
| Agency or Co. Ventura |  |  |  |  |  | Area Type All other areas  |  |  |  |  |  |
| Date 2/23/2009        |  |  |  |  |  | Jurisdiction   |  |  |  |  |  |
| Performed             |  |  |  |  |  | Analysis Year 2035 Projection  |  |  |  |  |  |
| Time Period P.M. Peak |  |  |  |  |  | Project ID Ven 118 & Ven 34/Donlon Impr - Bypass - Exist. 118/34 Inter |  |  |  |  |  |

|   | EB       |           |      | WB    |          |       | NB    |       |       | SB |    |     |
|---|----------|-----------|------|-------|----------|-------|-------|-------|-------|----|----|-----|
|   | LT       | TH        | RT   | LT    | TH       | RT    | LT    | TH    | RT    | LT | TH | RT  |
| Number of lanes, N <sub>l</sub>           | 0        | 1         | 0    | 0     | 1        | 0     | 1     | 0     | 1     | 0  | 0  | 0   |
| Lane group                                |          | TR        |      |       | LT       |       | L     |       | R     |    |    |     |
| Volume, V (vph)                           | 410      | 10        | 0    | 510   |          | 120   |       | 0     |       |    |    |     |
| % Heavy vehicles, %HV                     | 26       | 26        | 20   | 20    |          | 14    |       | 14    |       |    |    |     |
| Peak-hour factor, PHF                     | 1.00     | 1.00      | 1.00 | 1.00  |          | 1.00  |       | 1.00  |       |    |    |     |
| Pretimed (P) or actuated (A)              | P        | P         | P    | P     |          | P     |       | P     |       |    |    |     |
| Start-up lost time, l <sub>s</sub>        | 2.0      |           |      | 2.0   |          | 2.0   |       | 2.0   |       |    |    |     |
| Extension of effective green, e           |          | 2.0       |      |       | 2.0      |       | 2.0   |       | 2.0   |    |    |     |
| Arrival type, AT                          | 3        |           |      | 3     |          | 3     |       | 3     |       |    |    |     |
| Unit extension, UE                        | 3.0      |           |      | 3.0   |          | 3.0   |       | 3.0   |       |    |    |     |
| Filtering/metering, l                     | 1.000    |           |      | 1.000 |          | 1.000 | 1.000 | 1.000 | 1.000 |    |    |     |
| Initial unmet demand, Q <sub>b</sub>      | 0.0      |           |      | 0.0   |          | 0.0   |       | 0.0   |       |    |    |     |
| Ped / Bike / RTOR volumes                 | 1        |           | 0    |       |          |       | 0     |       | 0     | 0  |    |     |
| Lane width                                |          | 12.0      |      |       | 12.0     |       | 12.0  |       | 12.0  |    |    |     |
| Parking / Grade / Parking                 | N        | 0         | N    | N     | 0        | N     | N     | 0     | N     | N  |    | N   |
| Parking maneuvers, N <sub>m</sub>         |          |           |      |       |          |       |       |       |       |    |    |     |
| Buses stopping, N <sub>B</sub>            |          | 0         |      |       | 0        |       | 0     |       | 0     |    |    |     |
| Min. time for pedestrians, G <sub>p</sub> |          | 3.2       |      |       |          |       | 3.2   |       | 3.2   |    |    | 3.2 |
| Phasing                                   | WB Only  | Thru & RT | 03   | 04    | NB Only  | 06    | 07    | 08    |       |    |    |     |
| Timing                                    | G = 50.0 | G = 43.0  | G =  | G =   | G = 15.0 | G =   | G =   | G =   |       |    |    |     |

|                                |           |       |       |           |       |                         |       |
|--------------------------------|-----------|-------|-------|-----------|-------|-------------------------|-------|
| $Y = 6.5$                      | $Y = 6.5$ | $Y =$ | $Y =$ | $Y = 5.5$ | $Y =$ | $Y =$                   | $Y =$ |
| Duration of Analysis, T = 1.00 |           |       |       |           |       | Cycle Length, C = 126.5 |       |

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB   |       |    | WB           |       |    | NB               |    |       | SB |    |    |
|-------------------------------------|------|-------|----|--------------|-------|----|------------------|----|-------|----|----|----|
|                                     | LT   | TH    | RT | LT           | TH    | RT | LT               | TH | RT    | LT | TH | RT |
| Adjusted flow rate, v               |      | 420   |    |              | 510   |    | 120              |    | 0     |    |    |    |
| Lane group capacity, c              |      | 511   |    |              | 1245  |    | 188              |    | 790   |    |    |    |
| v/c ratio, X                        |      | 0.82  |    |              | 0.41  |    | 0.64             |    | 0.00  |    |    |    |
| Total green ratio, g/C              |      | 0.34  |    |              | 0.79  |    | 0.12             |    | 0.56  |    |    |    |
| Uniform delay, d <sub>1</sub>       |      | 38.2  |    |              | 4.3   |    | 53.2             |    | 12.4  |    |    |    |
| Progression factor, PF              |      | 1.000 |    |              | 1.000 |    | 1.000            |    | 1.000 |    |    |    |
| Delay calibration, k                |      | 0.50  |    |              | 0.50  |    | 0.50             |    | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |      | 15.5  |    |              | 1.0   |    | 16.5             |    | 0.0   |    |    |    |
| Initial queue delay, d <sub>3</sub> |      |       |    |              |       |    |                  |    |       |    |    |    |
| Control delay                       |      | 53.8  |    |              | 5.3   |    | 69.6             |    | 12.4  |    |    |    |
| Lane group LOS                      |      | D     |    |              | A     |    | E                |    | B     |    |    |    |
| Approach delay                      | 53.8 |       |    | 5.3          |       |    | 69.6             |    |       |    |    |    |
| Approach LOS                        | D    |       |    | A            |       |    | E                |    |       |    |    |    |
| Intersection delay                  | 32.0 |       |    | $X_c = 0.44$ |       |    | Intersection LOS |    |       | C  |    |    |

**HCS2000™ DETAILED REPORT**

| <b>General Information</b> |  |  |  |  |  | <b>Site Information</b>                    |  |  |  |  |  |
|----------------------------|--|--|--|--|--|--|--|--|--|--|--|
| Analyst trung duong        |  |  |  |  |  | Intersection Ven 118 & Bypass St           |  |  |  |  |  |
| Agency or Co. Ventura      |  |  |  |  |  | Area Type All other areas                  |  |  |  |  |  |
| Date Performed 3/24/09     |  |  |  |  |  | Jurisdiction Analysis Year 2035 Projection |  |  |  |  |  |
| Time Period P.M. Peak      |  |  |  |  |  | Ven 118 & Ven Project ID 34/Donlon Improv- |  |  |  |  |  |
|                            |  |  |  |  |  | Bypass-East Intersect                      |  |  |  |  |  |

**Volume and Timing Input**

|   | EB       |           |       | WB    |    |    | NB       |       |       | SB  |     |    |
|---|----------|-----------|-------|-------|----|----|----------|-------|-------|-----|-----|----|
|   | LT       | TH        | RT    | LT    | TH | RT | LT       | TH    | RT    | LT  | TH  | RT |
| Number of lanes, N <sub>1</sub>           | 0        | 1         | 1     | 2     | 1  | 0  | 1        | 0     | 1     | 0   | 0   | 0  |
| Lane group                                | T        | R         | L     | T     |    |    | L        |       | R     |     |     |    |
| Volume, V (vph)                           | 420      | 0         | 400   | 520   |    |    | 0        |       | 550   |     |     |    |
| % Heavy vehicles, %HV                     | 26       | 26        | 20    | 20    |    |    | 14       |       | 14    |     |     |    |
| Peak-hour factor, PHF                     | 1.00     | 1.00      | 1.00  | 1.00  |    |    | 1.00     |       | 1.00  |     |     |    |
| Pretimed (P) or actuated (A)              | P        | P         | P     | P     |    |    | P        |       | P     |     |     |    |
| Start-up lost time, l <sub>1</sub>        | 2.0      | 2.0       | 2.0   | 2.0   |    |    | 2.0      |       | 2.0   |     |     |    |
| Extension of effective green, e           | 2.0      | 2.0       | 2.0   | 2.0   |    |    | 2.0      |       | 2.0   |     |     |    |
| Arrival type, AT                          | 3        | 3         | 3     | 3     |    |    | 3        |       | 3     |     |     |    |
| Unit extension, UE                        | 3.0      | 3.0       | 3.0   | 3.0   |    |    | 3.0      |       | 3.0   |     |     |    |
| Filtering/metering, I                     | 1.000    | 1.000     | 1.000 | 1.000 |    |    | 1.000    | 1.000 | 1.000 |     |     |    |
| Initial unmet demand, Q <sub>b</sub>      | 0.0      | 0.0       | 0.0   | 0.0   |    |    | 0.0      |       | 0.0   |     |     |    |
| Ped / Bike / RTOR volumes                 | 1        |           | 0     |       |    |    | 0        |       | 0     |     |     |    |
| Lane width                                | 12.0     | 12.0      | 12.0  | 12.0  |    |    | 12.0     |       | 12.0  |     |     |    |
| Parking / Grade / Parking                 | N        | 0         | N     | N     | 0  | N  | N        | 0     | N     | N   |     | N  |
| Parking maneuvers, N <sub>m</sub>         |          |           |       |       |    |    |          |       |       |     |     |    |
| Buses stopping, N <sub>B</sub>            | 0        | 0         | 0     | 0     |    |    | 0        |       | 0     |     |     |    |
| Min. time for pedestrians, G <sub>p</sub> | 3.2      |           |       |       |    |    | 3.2      |       |       | 3.2 |     |    |
| Phasing                                   | WB Only  | Thru & RT | 03    | 04    |    |    | NB Only  | 06    | 07    |     | 08  |    |
| Timing                                    | G = 35.0 | G = 40.0  | G =   | G =   |    |    | G = 18.0 | G =   | G =   |     | G = |    |
|   | Y = 6.5  | Y = 6.5   | Y =   | Y =   |    |    | Y = 5.5  | Y =   | Y =   |     | Y = |    |

1.00

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB |       |       | WB    |              |    | NB    |                  |       | SB |    |    |
|-------------------------------------|----|-------|-------|-------|--------------|----|-------|------------------|-------|----|----|----|
|                                     | LT | TH    | RT    | LT    | TH           | RT | LT    | TH               | RT    | LT | TH | RT |
| Adjusted flow rate, v               |    | 420   | 0     | 400   | 520          |    | 0     |                  | 550   |    |    |    |
| Lane group capacity, c              |    | 541   | 460   | 916   | 1157         |    | 256   |                  | 743   |    |    |    |
| v/c ratio, X                        |    | 0.78  | 0.00  | 0.44  | 0.45         |    | 0.00  |                  | 0.74  |    |    |    |
| Total green ratio, g/C              |    | 0.36  | 0.36  | 0.31  | 0.73         |    | 0.16  |                  | 0.52  |    |    |    |
| Uniform delay, d <sub>1</sub>       |    | 31.8  | 22.9  | 30.4  | 6.0          |    | 39.2  |                  | 20.6  |    |    |    |
| Progression factor, PF              |    | 1.000 | 1.000 | 1.000 | 1.000        |    | 1.000 |                  | 1.000 |    |    |    |
| Delay calibration, k                |    | 0.50  | 0.50  | 0.50  | 0.50         |    | 0.50  |                  | 0.50  |    |    |    |
| Incremental delay, d <sub>2</sub>   |    | 11.2  | 0.0   | 1.5   | 1.3          |    | 0.0   |                  | 6.8   |    |    |    |
| Initial queue delay, d <sub>3</sub> |    |       |       |       |              |    |       |                  |       |    |    |    |
| Control delay                       |    | 43.0  | 22.9  | 31.9  | 7.3          |    | 39.2  |                  | 27.4  |    |    |    |
| Lane group LOS                      |    | D     | C     | C     | A            |    | D     |                  | C     |    |    |    |
| Approach delay                      |    | 43.0  |       |       | 18.0         |    |       | 27.4             |       |    |    |    |
| Approach LOS                        |    | D     |       |       | B            |    |       | C                |       |    |    |    |
| Intersection delay                  |    | 26.3  |       |       | $X_c = 0.75$ |    |       | Intersection LOS |       |    |    | C  |

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## HCS2000™ DETAILED REPORT

| General Information   |  |  |  |  |  | Site Information   |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|
| Analyst trung duong   |  |  |  |  |  | Intersection Ven 34 (Somis RD)& Bypass St                        |  |  |  |  |  |
| Agency or Co. Ventura |  |  |  |  |  | Area Type All other areas  |  |  |  |  |  |
| Date 3/24/09          |  |  |  |  |  | Jurisdiction Analysis Year 2035 Projection                       |  |  |  |  |  |
| Performed P.M. Peak   |  |  |  |  |  | Project ID Ven 118 & Ven 34/Donlon Improv-Bypass-South Intersect |  |  |  |  |  |

## Volume and Timing Input

|   | EB       |     |     | WB    |          |       | NB  |       |                         | SB   |       |    |
|---|----------|-----|-----|-------|----------|-------|-----|-------|-------------------------|------|-------|----|
|   | LT       | TH  | RT  | LT    | TH       | RT    | LT  | TH    | RT                      | LT   | TH    | RT |
| Number of lanes, N <sub>l</sub>           | 0        | 0   | 0   | 1     | 0        | 1     | 0   | 1     | 1                       | 0    | 1     | 0  |
| Lane group                                |          |     |     | L     |          | R     |     | T     | R                       |      | LT    |    |
| Volume, V (vph)                           |          |     |     | 400   |          | 0     |     | 190   | 550                     | 0    | 100   |    |
| % Heavy vehicles, %HV                     |          |     |     | 20    |          | 0     |     | 0     | 14                      | 0    | 0     |    |
| Peak-hour factor, PHF                     |          |     |     | 1.00  |          | 1.00  |     | 1.00  | 1.00                    | 1.00 | 1.00  |    |
| Pretimed (P) or actuated A)               |          |     |     | P     |          | P     |     | P     | P                       | A    | P     |    |
| Start-up lost time, l <sub>1</sub>        |          |     |     | 2.0   |          | 2.0   |     | 2.0   | 2.0                     |      | 2.0   |    |
| Extension of effective green, e           |          |     |     | 2.0   |          | 2.0   |     | 2.0   | 2.0                     |      | 2.0   |    |
| Arrival type, AT                          |          |     |     | 3     |          | 3     |     | 3     | 3                       |      | 3     |    |
| Unit extension, UE                        |          |     |     | 3.0   |          | 3.0   |     | 3.0   | 3.0                     |      | 3.0   |    |
| Filtering/metering, I                     |          |     |     | 1.000 | 1.000    | 1.000 |     | 1.000 | 1.000                   |      | 1.000 |    |
| Initial unmet demand, Q <sub>b</sub>      |          |     |     | 0.0   |          | 0.0   |     | 0.0   | 0.0                     |      | 0.0   |    |
| Ped / Bike / RTOR volumes                 | 1        |     |     | 0     |          | 0     | 0   |       | 0                       |      |       |    |
| Lane width                                |          |     |     | 12.0  |          | 12.0  |     | 12.0  | 12.0                    |      | 12.0  |    |
| Parking / Grade / Parking                 | N        |     | N   | N     | 0        | N     | N   | 0     | N                       | N    | 0     | N  |
| Parking maneuvers, N <sub>m</sub>         |          |     |     |       |          |       |     |       |                         |      |       |    |
| Buses stopping, N <sub>B</sub>            |          |     |     | 0     |          | 0     |     | 0     | 0                       |      | 0     |    |
| Min. time for pedestrians, t <sub>p</sub> |          |     | 3.2 |       |          | 3.2   |     |       | 3.2                     |      |       |    |
| Phasing                                   | WB Only  | 02  | 03  | 04    | NS Perm  | 06    | 07  | 08    |                         |      |       |    |
| Timing                                    | G = 55.0 | G = | G = | G =   | G = 50.0 | G =   | G = | G =   |                         |      |       |    |
|   | Y = 5.5  | Y = | Y = | Y =   | Y = 5    | Y =   | Y = | Y =   |                         |      |       |    |
| Duration of Analysis, T =                 |          |     |     |       |          |       |     |       | Cycle Length, C = 115.5 |      |       |    |

1.00

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB   |    |    | WB           |    |       | NB               |       |       | SB   |       |    |
|-------------------------------------|------|----|----|--------------|----|-------|------------------|-------|-------|------|-------|----|
|                                     | LT   | TH | RT | LT           | TH | RT    | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v               |      |    |    | 400          |    | 0     |                  | 190   | 550   |      | 100   |    |
| Lane group capacity, c              |      |    |    | 716          |    | 769   |                  | 823   | 1417  |      | 823   |    |
| v/c ratio, X                        |      |    |    | 0.56         |    | 0.00  |                  | 0.23  | 0.39  |      | 0.12  |    |
| Total green ratio, g/C              |      |    |    | 0.48         |    | 0.48  |                  | 0.43  | 1.00  |      | 0.43  |    |
| Uniform delay, d <sub>1</sub>       |      |    |    | 21.6         |    | 15.8  |                  | 20.6  | 0.0   |      | 19.6  |    |
| Progression factor, PF              |      |    |    | 1.000        |    | 1.000 |                  | 1.000 | 0.950 |      | 1.000 |    |
| Delay calibration, k                |      |    |    | 0.50         |    | 0.50  |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, d <sub>2</sub>   |      |    |    | 3.2          |    | 0.0   |                  | 0.7   | 0.8   |      | 0.3   |    |
| Initial queue delay, d <sub>3</sub> |      |    |    |              |    |       |                  |       |       |      |       |    |
| Control delay                       |      |    |    | 24.8         |    | 15.8  |                  | 21.3  | 0.8   |      | 19.9  |    |
| Lane group LOS                      |      |    |    | C            |    | B     |                  | C     | A     |      | B     |    |
| Approach delay                      |      |    |    | 24.8         |    |       | 6.1              |       |       | 19.9 |       |    |
| Approach LOS                        |      |    |    | C            |    |       | A                |       |       | B    |       |    |
| Intersection delay                  | 13.2 |    |    | $X_c = 0.39$ |    |       | Intersection LOS |       |       | B    |       |    |

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# HCS2000™ DETAILED REPORT

| General Information                       |            |           |       |       |       | Site Information   |      |       |       |      |       |      |
|---|------------|-----------|-------|-------|-------|--|------|-------|-------|------|-------|------|
| Analyst trung-duong                       |            |           |       |       |       | Intersection Ven 118 & Ven 34/Donlon Rd                            |      |       |       |      |       |      |
| Agency or Co. Ventura                     |            |           |       |       |       | Area Type All other areas  |      |       |       |      |       |      |
| Date 6/10/2009                            |            |           |       |       |       | Jurisdiction   |      |       |       |      |       |      |
| Performed P.M. Peak                       |            |           |       |       |       | Analysis Year 2035 Projection                                      |      |       |       |      |       |      |
|   |            |           |       |       |       | Project ID Ven 118 & Ven 34/Donlon Inter. Improvement - Bridge Alt |      |       |       |      |       |      |
| Volume and Timing Input                   |            |           |       |       |       |  |      |       |       |      |       |      |
|   | EB         |           |       | WB    |       |  | NB   |       |       | SB   |       |      |
|   | LT         | TH        | RT    | LT    | TH    | RT   | LT   | TH    | RT    | LT   | TH    | RT   |
| Number of lanes, N <sub>1</sub>           | 1          | 1         | 1     | 2     | 1     | 0  | 0    | 1     | 1     | 0    | 1     | 0    |
| Lane group                                | L          | T         | R     | L     | TR    |  |      | LT    | R     |      | LTR   |      |
| Volume, V (vph)                           | 30         | 380       | 10    | 400   | 510   | 10   | 120  | 70    | 550   | 30   | 80    | 40   |
| % Heavy vehicles, %HV                     | 26         | 26        | 26    | 20    | 20    | 20   | 14   | 14    | 14    | 0    | 0     | 0    |
| Peak-hour factor, PHF                     | 1.00       | 1.00      | 1.00  | 1.00  | 1.00  | 1.00   | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 |
| Pretimed (P) or actuated (A)              | P          | P         | P     | P     | P     | P  | P    | P     | P     | P    | P     | P    |
| Start-up lost time, l <sub>1</sub>        | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |  |      | 2.0   | 2.0   |      | 2.0   |      |
| Extension of effective green, e           | 2.0        | 2.0       | 2.0   | 2.0   | 2.0   |  |      | 2.0   | 2.0   |      | 2.0   |      |
| Arrival type, AT                          | 3          | 3         | 3     | 3     | 3     |  |      | 3     | 3     |      | 3     |      |
| Unit extension, UE                        | 3.0        | 3.0       | 3.0   | 3.0   | 3.0   |  |      | 3.0   | 3.0   |      | 3.0   |      |
| Filtering/metering, I                     | 1.000      | 1.000     | 1.000 | 1.000 | 1.000 |  |      | 1.000 | 1.000 |      | 1.000 |      |
| Initial unmet demand, Q <sub>b</sub>      | 0.0        | 0.0       | 0.0   | 0.0   | 0.0   |  |      | 0.0   | 0.0   |      | 0.0   |      |
| Ped / Bike / RTOR volumes                 | 0          |           | 0     | 0     |       |  | 0    | 0     |       | 0    | 0     | 0    |
| Lane width                                | 12.0       | 12.0      | 12.0  | 12.0  | 12.0  |  |      | 12.0  | 12.0  |      | 12.0  |      |
| Parking / Grade / Parking                 | N          | 0         | N     | N     | 0     | N  | N    | 0     | N     | N    | 0     | N    |
| Parking maneuvers, N <sub>m</sub>         |            |           |       |       |       |  |      |       |       |      |       |      |
| Buses stopping, N <sub>B</sub>            | 0          | 0         | 0     | 0     | 0     |  |      | 0     | 0     |      | 0     |      |
| Min. time for pedestrians, G <sub>p</sub> |            | 3.2       |       |       | 3.2   |  |      | 3.2   |       |      | 3.2   |      |
| Phasing                                   | Excl. Left | Thru & RT | 03    | 04    |       | NS Perm.   | 06   |       | 07    |      | 08    |      |
| Timing                                    | G = 17.0   | G = 35.0  | G =   | G =   |       | G = 24.0   | G =  |       | G =   |      | G =   |      |

|                                |           |       |       |           |       |       |                        |
|--------------------------------|-----------|-------|-------|-----------|-------|-------|------------------------|
| $Y = 5.5$                      | $Y = 5.5$ | $Y =$ | $Y =$ | $Y = 4.5$ | $Y =$ | $Y =$ | $Y =$                  |
| Duration of Analysis, T = 1.00 |           |       |       |           |       |       | Cycle Length, C = 91.5 |

**Lane Group Capacity, Control Delay, and LOS Determination**

|                                     | EB    |       |       | WB           |       |    | NB               |       |       | SB   |       |    |
|-------------------------------------|-------|-------|-------|--------------|-------|----|------------------|-------|-------|------|-------|----|
|                                     | LT    | TH    | RT    | LT           | TH    | RT | LT               | TH    | RT    | LT   | TH    | RT |
| Adjusted flow rate, v               | 30    | 380   | 10    | 400          | 520   |    |                  | 190   | 550   |      | 150   |    |
| Lane group capacity, c              | 266   | 577   | 490   | 542          | 604   |    |                  | 299   | 705   |      | 435   |    |
| v/c ratio, X                        | 0.11  | 0.66  | 0.02  | 0.74         | 0.86  |    |                  | 0.64  | 0.78  |      | 0.34  |    |
| Total green ratio, g/C              | 0.19  | 0.38  | 0.38  | 0.19         | 0.38  |    |                  | 0.26  | 0.50  |      | 0.26  |    |
| Uniform delay, d <sub>1</sub>       | 31.0  | 23.3  | 17.6  | 35.1         | 26.0  |    |                  | 29.9  | 18.9  |      | 27.4  |    |
| Progression factor, PF              | 1.000 | 1.000 | 1.000 | 1.000        | 1.000 |    |                  | 1.000 | 1.000 |      | 1.000 |    |
| Delay calibration, k                | 0.50  | 0.50  | 0.50  | 0.50         | 0.50  |    |                  | 0.50  | 0.50  |      | 0.50  |    |
| Incremental delay, d <sub>2</sub>   | 0.9   | 6.0   | 0.1   | 9.2          | 17.3  |    |                  | 10.3  | 8.9   |      | 2.2   |    |
| Initial queue delay, d <sub>3</sub> |       |       |       |              |       |    |                  |       |       |      |       |    |
| Control delay                       | 31.8  | 29.3  | 17.7  | 44.3         | 43.3  |    |                  | 40.2  | 27.8  |      | 29.5  |    |
| Lane group LOS                      | C     | C     | B     | D            | D     |    |                  | D     | C     |      | C     |    |
| Approach delay                      | 29.2  |       |       | 43.7         |       |    | 31.0             |       |       | 29.5 |       |    |
| Approach LOS                        | C     |       |       | D            |       |    | C                |       |       | C    |       |    |
| Intersection delay                  | 35.8  |       |       | $X_c = 0.82$ |       |    | Intersection LOS |       |       | D    |       |    |

---

**ATTACHMENT 6**

**TSAR & TABLE B**

OTM22130

*Table B - Selective Accident Rate Calculation*

**Report Parameters-**

Event ID: 2890955

Request Name: TRUNG 583

Ref Date: 03/11/2010

| Request-<br>& Line | L<br>O<br>C | D<br>I<br>R | L<br>S<br>C | Out<br>Seq | Override Rates |          |              | Override ADT |      |      | Reg. | Com-<br>bine? | Excl<br>Ramp? |   |
|--------------------|-------------|-------------|-------------|------------|----------------|----------|--------------|--------------|------|------|------|---------------|---------------|---|
|                    |             |             |             |            | Begin Date     | End Date | Rate<br>Type | Out<br>Seq   | Rate | Inj% | Fat% | Main          | Cross         |   |
| 1 1 1 T 1          | 07 VEN 118  | 010.920     | -           | 01-APR-06  | 31-MAR-09      | N        | L            |              |      |      |      | N             | N             | N |
|                    | 07 VEN 118  | 010.921     |             |            |                |          |              |              |      |      |      |               |               |   |

Event Log:

Job id is : 3757 Accidents Table B Request TRUNG 583 Submitted by TTYSFAIL  
07 VEN 118 10.92 - 07 VEN 118 10.921 04/01/2006 TO 03/31/2009

California Department of Transportation  
Table B - Selective Accident Rate Calculation

Page# 1  
Event ID: 2890955

| Location Description  | Rate Group (RUS) | No. of Accidents / Significance |     |     |     |           |         | Pers | ADT Main X-St | Total MV+ or MVW | Accident Rates |             |                             |
|---|------------------|---------------------------------|-----|-----|-----|-----------|---------|------|---------------|------------------|----------------|-------------|-----------------------------|
|   |                  | Tot                             | Fat | Inj | F+I | Multi Veh | Kid Inj |      |               |                  | Actual F+I     | Average Fat | Average Tot                 |
| 07 VEN 118 010.920 LOS ANGELES AVE:JCT 118<br>0001-0001 2006-04-01 36 mo. | S                | 124                             | 14  | 0   | 1   | 1         | 8       | 0    | 2             | 0                | 14.8           | 29.77 +     | 0.000 .03 .47 .0002 .11 .30 |

Accident Rates expressed as:

# of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

OTM22200

## TSAR - ACCIDENT DETAIL

### REPORT PARAMETERS:

|                    |   |   |
|--------------------|---|---|
| REPORT DATE        | : | 03/11/2010  |
| REFERENCE DATE     | : | 03/11/2010  |
| SUBMITTOR          | : | T7YSFAIL  |
| REPORT TITLE       | : | ALL INT & HWY ACCIDENTS ON VEN-118, PM                                |
| EVENT ID           | : | 10.920, FOR TIME PERIOD 4/1/06 THRU<br>3/31/09, TRUNG DUONG, LOG #583 |
| LOCATION CRITERIA: |   | 2891109   |

|       |                    |     |                    |
|-------|--------------------|-----|--------------------|
| FROM: | 07-VEN-118 010.873 | TO: | 07-VEN-118 010.967 |
| FROM: | 07-VEN-034 017.613 | TO: | 07-VEN-034 017.663 |

### SELECTION CRITERIA:

1 1 AND 508 - FILE TYPE IN I, H

### Accidents Date Range:

From -- 04/01/2006 To -- 03/31/2009

Total Accidents Retrieved:

14

3

' ALL INT & HWY ACCIDENTS ON VEN-118, PM 10:58, FOR TIME PERIOD 4/1/06 THRU 3/31/09, TRUNG DUONG, LOG #583 :

Page#  
1

Event ID :  
2891109

| RTE S      | P       | H A M B L A N E S R F R O A DATE | I S D ACCIDENT    | TIME | COMMON          | P ENVIR          | R T NO     | D V S PERSON                | O L O L O L O L O L |
|------------|---------|----------------------------------|-------------------|------|-----------------|------------------|------------|-----------------------------|---------------------|
| DI NO F CO | R POST  | G C T A LT RT U T L H Y MM-DD-YY | F W L S C C C VEH | HHMM | ACCIDENT NUMBER | C COND           | R W O MTR  | P I H I K T S O S O S O S O | O A M SD            |
| E MILE     |         |                                  |                   |      |                 | F W L S C C C    | A R I      | P C O C O C O C             | O A M SD            |
| 07 034 VEN | 017.620 | U C B Z 01 01 U H                | W 5 06-14-07      | 1700 | 977014694       | 3 A A H D B 02   | A W 1 C 00 | V2 G 00                     | N < E A <           |
| 07 034 VEN | 017.640 | U C B Z 01 01 U H                | E 6 09-12-08      | 1500 | 977017617       | 6 A A A H A B 02 | D W 1 C 00 | V1 F 00                     | N < B A <           |
| 07 034 VEN | 017.650 | U C B Z 01 01 U H                | W 4 06-20-07      | 0535 | 977018024       | 5 A A A H D F 01 | D E 1 C 00 | V2 D 00                     | N < I G <           |
| 07 034 VEN | 017.650 | U C B Z 01 01 U H                | E 3 06-26-07      | 1628 | 977014694       | 6 A A A H A C 02 | A E 1 C 00 | V1 F 00                     | N < A G <           |
| 07 034 VEN | 017.650 | U C B Z 01 01 U H                | E 7 03-22-08      | 1430 | 977011127       | 5 A A A H A C 02 | D E 1 C 00 | 44 H 00                     | N < E A <           |
| 07 118 VEN | 010.890 | U C B Z 01 01 R H                | E 3 06-13-06      | 1020 | 976515739       | 5 A A A H D C 03 | 2 E 1 C 00 | V2 F 00                     | N < B A <           |
| 07 118 VEN | 010.910 | U C B Z 01 01 R H                | E 2 06-19-06      | 1233 | 976515696       | 6 A A A H A E 01 | A E 1 C 00 | V1 F 01                     | N < A A <           |
| 07 118 VEN | 010.910 | U C B Z 01 01 R H                | E 1 09-03-06      | 1800 | 976518099       | 1 A A A H A C 02 | D E 1 C 00 | V3 F 02                     | N < A A <           |
| 07 118 VEN | 010.910 | U C B Z 01 01 R H                | E 2 08-20-07      | 1500 | 976516332       | 4 A A A H A E 01 | M E 1 C 00 | 10 H 00                     | N < I G <           |
| 07 118 VEN | 010.910 | U C B Z 01 01 R H                | E 5 09-20-07      | 0120 | 977017982       | 4 A C A H A E 01 | M < 1 < 00 | 00 10 H 00                  | N < B B <           |
| 07 118 VEN | 010.930 | U C B Z 01 01 R H                | W 1 12-10-06      | 1430 | 977017732       | 6 A A A H D B 02 | D W 1 C 00 | V2 D 00                     | N < A A <           |
| 07 118 VEN | 010.930 | U C B Z 01 01 R H                | E 2 08-20-07      | 1500 | 976516332       | 4 A A A H A E 01 | A W 1 C 00 | V1 J 00                     | N < D G <           |
| 07 118 VEN | 010.930 | U C B Z 01 01 R H                | E 5 09-20-07      | 0120 | 977017982       | 4 A C A H A E 01 | A W 1 C 00 | .99 F 00                    | N < C G <           |
| 07 118 VEN | 010.930 | U C B Z 01 01 R H                | W 1 12-10-06      | 1430 | 977017732       | 6 A A A H D B 02 | D W 1 C 00 | V2 F 00                     | N < I A <           |
| 07 118 VEN | 010.930 | U C B Z 01 01 R H                | W 4 03-14-07      | 1145 | 977011779       | D A A A H A C 01 | A W 1 C 00 | .99 F 00                    | N < A A <           |
| 07 118 VEN | 010.930 | U C B Z 01 01 R H                | W 2 05-26-08      | 1430 | 977018881       | 1 B A A H A C 02 | A W 1 C 00 | V2 F 00                     | N < B B <           |
| 07 118 VEN | 010.930 | U C B Z 01 01 R H                | W 2 03-02-09      | 1917 | 977018660       | 4 B C A H D E 01 | A W 1 C 00 | 23 H 00                     | N < A A <           |
| 07 118 VEN | 010.930 | U C B Z 01 01 R H                | W 2 03-02-09      | 1917 | 977018660       | 4 B C A H D E 01 | A W 1 C 00 | 23 H 00                     | N < M D <           |

Total Accidents: 14

*California Department of Transportation*

OTM22215

**TSAR - ACCIDENT SUMMARY**

**REPORT PARAMETERS:**

REPORT DATE : 03/11/2010  
REFERENCE DATE : 03/11/2010  
SUBMITTOR : T7YSFALL  
REPORT TITLE : ALL INT & HWY ACCIDENTS ON VEN-118, PM  
EVENT ID : 10.920, FOR TIME PERIOD 4/1/06 THRU  
3/31/09, TRUNG DUONG, LOG #583  
LOCATION CRITERIA: 2891109

FROM: 07-VEN-118 010.873 TO: 07-VEN-118 010.967  
FROM: 07-VEN-034 017.613 TO: 07-VEN-034 017.663

**SELECTION CRITERIA:**

1 1 AND 508 - FILE TYPE IN I, H

**Accidents Date Range:**

From -- 04/01/2006 To -- 03/31/2009

| TOTAL ACCIDENTS |   |   | FATAL | INJURY      | PDO    | KILLED | INJURED         | MOTOR VEHICLES INVOLVED | NUMBER | PCT  | CODE         | NUMBER          | PCT    | CODE        |      |
|-----------------|---|---|-------|-------------|--------|--------|-----------------|-------------------------|--------|------|--------------|-----------------|--------|-------------|------|
| HOUR OF DAY     |   |   | PCT   | CODE        | NUMBER | PCT    | CODE            | ACCESS CONTROL          | NUMBER | PCT  | CODE         | SIDE OF HIGHWAY | NUMBER | PCT         | CODE |
| YEAR            |   |   | PCT   | CODE        | NUMBER | PCT    | CODE            | MONTH                   | NUMBER | PCT  | CODE         | DAY OF WEEK     | NUMBER | PCT         | CODE |
| 14              | 0 | 1 | 0.0   | 00- 12 MID. | 14     | 100.0  | C-CONVENTIONAL  |                         | 0      | 0.0  | N-NORTHBOUND |                 | 14:3   | 1-SUNDAY    |      |
|                 |   |   | 7.1   | 01- 1 A.M.  |        | 0      | E-EXPRESSWAY    |                         |        | 0    | S-SOUTHBOUND |                 | 28.6   | 2-MONDAY    |      |
|                 |   |   | 0.0   | 02- 2 A.M.  |        | 0      | F-FREWAY        |                         |        | 8    | E-EASTBOUND  |                 | 14.3   | 3-TUESDAY   |      |
|                 |   |   | 0.0   | 03- 3 A.M.  |        | 0      | S-1 WAY CITY ST |                         |        | 6    | W-WESTBOUND  |                 | 14.3   | 4-WEDNESDAY |      |
|                 |   |   | 0.0   | 04- 4 A.M.  |        | 0      | --INVALID DATA  |                         |        | 42.9 |              |                 | 14.3   | 5-THURSDAY  |      |
|                 |   |   | 1     | 05- 5 A.M.  |        | 0      | +--NO DATA      |                         |        |      |              |                 | 7.1    | 6-FRIDAY    |      |
|                 |   |   | 0     | 06- 6 A.M.  |        |        |                 |                         |        |      |              |                 | 7.1    | 7-SATURDAY  |      |
|                 |   |   | 0     | 07- 7 A.M.  |        |        |                 |                         |        |      |              |                 | 1      |             |      |
|                 |   |   | 0     | 08- 8 A.M.  |        |        |                 |                         |        |      |              |                 |        |             |      |
|                 |   |   | 1     | 09- 9 A.M.  |        |        |                 |                         |        |      |              |                 |        |             |      |
|                 |   |   | 1     | 10- 10 A.M. |        |        |                 |                         |        |      |              |                 |        |             |      |
|                 |   |   | 1     | 11- 11 A.M. |        |        |                 |                         |        |      |              |                 |        |             |      |
|                 |   |   | 1     | 12- 12 NOON |        |        |                 |                         |        |      |              |                 |        |             |      |
|                 |   |   | 1     | 13- 1 P.M.  |        | 0      | 0.0             | 1999                    | 0      | 0.0  | 01-JANUARY   |                 | 2      | 14:3        |      |
|                 |   |   | 3     | 14- 2 P.M.  |        | 0      | 0.0             | 2000                    | 0      | 0.0  | 02-FEBRUARY  |                 | 4      | 28.6        |      |
|                 |   |   | 2     | 15- 3 P.M.  |        | 0      | 0.0             | 2001                    | 3      | 21.4 | 03-MARCH     |                 | 2      | 14.3        |      |
|                 |   |   | 1     | 16- 4 P.M.  |        | 0      | 0.0             | 2002                    | 0      | 0.0  | 04-APRIL     |                 | 2      | 14.3        |      |
|                 |   |   | 1     | 17- 5 P.M.  |        | 0      | 0.0             | 2003                    | 1      | 7.1  | 05-MAY       |                 | 2      | 14.3        |      |
|                 |   |   | 1     | 18- 6 P.M.  |        | 0      | 0.0             | 2004                    | 5      | 35.7 | 06-JUNE      |                 | 1      | 7.1         |      |
|                 |   |   | 1     | 19- 7 P.M.  |        | 0      | 0.0             | 2005                    | 0      | 0.0  | 07-JULY      |                 | 1      | 7.1         |      |
|                 |   |   | 0     | 20- 8 P.M.  |        | 4      | 28.6            | 2006                    | 1      | 7.1  | 08-AUGUST    |                 |        |             |      |
|                 |   |   | 0     | 21- 9 P.M.  |        | 6      | 42.9            | 2007                    | 3      | 21.4 | 09-SEPTEMBER |                 |        |             |      |
|                 |   |   | 0     | 22- 10 P.M. |        | 3      | 21.4            | 2008                    | 0      | 0.0  | 10-OCTOBER   |                 |        |             |      |
|                 |   |   | 0     | 23- 11 P.M. |        | 1      | 7.1             | 2009                    | 0      | 0.0  | 11-NOVEMBER  |                 |        |             |      |
|                 |   |   | 0     | 25- UNKNOWN |        | 0      | 0.0             | 2010                    | 1      | 7.1  | 12-DECEMBER  |                 |        |             |      |

| <-- PRIMARY COLLISION FACTOR --> |      |                     | <-- TYPE OF COLLISION --> |      |                   | <-- ROADWAY CONDITION --> |       |                         |
|----------------------------------|------|---------------------|---------------------------|------|-------------------|---------------------------|-------|-------------------------|
| NUMBER                           | PCT  | CODE                | NUMBER                    | PCT  | CODE              | NUMBER                    | PCT   | CODE                    |
| 2                                | 14.3 | 1-INFLUENCE ALCOHOL | 0                         | 0.0  | A-HIT-ON          | 0                         | 0.0   | A-HOLES, RUTS           |
| 0                                | 0.0  | 2-FOLLOW TOO CLOSE  | 3                         | 21.4 | B-SIDESWIPE       | 0                         | 0.0   | B-LOOSE MATERIAL        |
| 1                                | 7.1  | 3-FAILURE TO YIELD  | 6                         | 42.9 | C-REAR END        | 0                         | 0.0   | C-OBSSTRUCTION-ON ROAD  |
| 3                                | 21.4 | 4-IMPROPER TURN     | 0                         | 0.0  | D-BROADSIDE       | 0                         | 0.0   | D-CONSTRUCT-REPAIR-ZONE |
| 3                                | 21.4 | 5-SPEEDING          | 4                         | 28.6 | E-HIT OBJECT      | 0                         | 0.0   | E-REDUCED ROAD WIDTH    |
| 4                                | 28.6 | 6-OTHER VIOLATIONS  | 1                         | 7.1  | F-OVERTURN        | 0                         | 0.0   | F-FLOODED               |
| 0                                | 0.0  | B-IMPROPER DRIVING  | 0                         | 0.0  | G-AUTO-PEDESTRIAN | 0                         | 0.0   | G-OTHER                 |
| 0                                | 0.0  | C-OTHER THAN DRIVER | 0                         | 0.0  | H-OTHER           | 14                        | 100.0 | H-NO UNUSUAL CONDITION  |
| 1                                | 7.1  | D-UNKNOWN           | 0                         | 0.0  | <-NOT STATED      | 0                         | 0.0   | <-NOT STATED            |
| 0                                | 0.0  | E-FELL SLEEP        | 0                         | 0.0  | -INVALID CODES    | 0                         | 0.0   | -INVALID CODES          |
| 0                                | 0.0  | <-NOT STATED        | 0                         | 0.0  | -INVALID CODES    | 0                         | 0.0   | -INVALID CODES          |
| 0                                | 0.0  | -INVALID CODES      |                           |      |                   |                           |       |                         |

| <-- WEATHER --> |      |                | <-- LIGHTING --> |      |                           | <-- ROAD SURFACE --> |       |                |
|-----------------|------|----------------|------------------|------|---------------------------|----------------------|-------|----------------|
| NUMBER          | PCT  | CODE           | NUMBER           | PCT  | CODE                      | NUMBER               | PCT   | CODE           |
| 12              | 85.7 | A-CLEAR        | 12               | 85.7 | A-DAY LIGHT               | 14                   | 100.0 | A-DRY          |
| 2               | 14.3 | B-CLOUDY       | 0                | 0.0  | B-DUSK/DAWN               | 0                    | 0.0   | B-WET          |
| 0               | 0.0  | C-RAINING      | 2                | 14.3 | C-DARK-STREET LIGHT       | 0                    | 0.0   | C-SNOWY, ICY   |
| 0               | 0.0  | D-SNOWING      | 0                | 0.0  | D-DARK-NO STREET LIGHT    | 0                    | 0.0   | D-SLIPPERY     |
| 0               | 0.0  | E-FOG          | 0                | 0.0  | E-DARK-INOPR STREET LIGHT | 0                    | 0.0   | <-NOT STATED   |
| 0               | 0.0  | F-OTHER        | 0                | 0.0  | F-DARK-NOT STATED         | 0                    | 0.0   | -INVALID CODES |
| 0               | 0.0  | G-WIND         | 0                | 0.0  | <-NOT STATED              | 0                    | 0.0   | <-NOT STATED   |
| 0               | 0.0  | <-NOT STATED   | 0                | 0.0  | -INVALID CODES            | 0                    | 0.0   | -INVALID CODES |
| 0               | 0.0  | -INVALID CODES |                  |      |                           |                      |       |                |

| <-- HIGHWAY GROUP --> |      |                           | <-- INTERSECTION/RAMP ACCIDENT LOCATION --> |       |                    |   |     |                                  |
|-----------------------|------|---------------------------|---|-------|--------------------|---|-----|----------------------------------|
| NUMBER                | PCT  | CODE                      | NUMBER                                      | PCT   | CODE               |   |     |                                  |
| 9                     | 64.3 | A-CONTROL FUNCTIONING     | 0   | 0.0   | R-IND. ALIGN RIGHT | 0 | 0.0 | 1-RAMP INTERSECTION (EXIT)       |
| 0                     | 0.0  | B-CONTROL NOT FUNCTIONING | 0   | 0.0   | L-IND. ALIGN LEFT  | 0 | 0.0 | 2-RAMP                           |
| 0                     | 0.0  | C-CONTROLS OBSCURED       | 0   | 0.0   | D-DIVIDED          | 0 | 0.0 | 3-RAMP ENTRY                     |
| 5                     | 35.7 | D-NO CONTROLS PRESENT     | 14  | 100.0 | U-UNDIVIDED        | 0 | 0.0 | 4-RAMP AREA, INTERSECTION STREET |
| 0                     | 0.0  | <-NOT STATED              |   |       |                    | 0 | 0.0 | 5-IN INTERSECTION                |
| 0                     | 0.0  | -INVALID CODES            |   |       |                    | 0 | 0.0 | 6-OUTSIDE INTRCT-NONSTATE RTE    |

| <-- RIGHT OF WAY CONTROL --> |      |                           | <-- INTERSECTION/RAMP ACCIDENT LOCATION --> |       |                    |   |     |                                  |
|------------------------------|------|---------------------------|---|-------|--------------------|---|-----|----------------------------------|
| NUMBER                       | PCT  | CODE                      | NUMBER                                      | PCT   | CODE               |   |     |                                  |
| 9                            | 64.3 | A-CONTROL FUNCTIONING     | 0   | 0.0   | R-IND. ALIGN RIGHT | 0 | 0.0 | 1-RAMP INTERSECTION (EXIT)       |
| 0                            | 0.0  | B-CONTROL NOT FUNCTIONING | 0   | 0.0   | L-IND. ALIGN LEFT  | 0 | 0.0 | 2-RAMP                           |
| 0                            | 0.0  | C-CONTROLS OBSCURED       | 0   | 0.0   | D-DIVIDED          | 0 | 0.0 | 3-RAMP ENTRY                     |
| 5                            | 35.7 | D-NO CONTROLS PRESENT     | 14  | 100.0 | U-UNDIVIDED        | 0 | 0.0 | 4-RAMP AREA, INTERSECTION STREET |
| 0                            | 0.0  | <-NOT STATED              |   |       |                    | 0 | 0.0 | 5-IN INTERSECTION                |
| 0                            | 0.0  | -INVALID CODES            |   |       |                    | 0 | 0.0 | 6-OUTSIDE INTRCT-NONSTATE RTE    |

| <-- ROADWAY CONDITION --> |      |                         | <-- INTERSECTION/RAMP ACCIDENT LOCATION --> |     |                                  |
|---------------------------|------|-------------------------|---|-----|----------------------------------|
| NUMBER                    | PCT  | CODE                    | NUMBER                                      | PCT | CODE                             |
| 2                         | 14.3 | A-HOLES, RUTS           | 0   | 0.0 | 1-RAMP INTERSECTION (EXIT)       |
| 0                         | 0.0  | B-LOOSE MATERIAL        | 0   | 0.0 | 2-RAMP                           |
| 1                         | 7.1  | C-OBSSTRUCTION-ON ROAD  | 0   | 0.0 | 3-RAMP ENTRY                     |
| 3                         | 21.4 | D-CONSTRUCT-REPAIR-ZONE | 0   | 0.0 | 4-RAMP AREA, INTERSECTION STREET |
| 3                         | 21.4 | E-REDUCED ROAD WIDTH    | 0   | 0.0 | 5-IN INTERSECTION                |
| 4                         | 28.6 | F-FLOODING              | 0   | 0.0 | 6-OUTSIDE INTRCT-NONSTATE RTE    |
| 0                         | 0.0  | G-OTHER                 |   |     | --DOES NOT APPLY                 |
| 0                         | 0.0  | H-NO UNUSUAL CONDITION  |   |     |                                  |
| 0                         | 0.0  | <-NOT STATED            |   |     |                                  |
| 0                         | 0.0  | -INVALID CODES          |   |     |                                  |

## &lt;-- DIRECTION OF TRAVEL --&gt;

| NUMBER | PCT  | CODE                        | NUMBER | PCT  | CODE                       | NUMBER | PCT  | CODE  |
|--------|------|-----------------------------|--------|------|----------------------------|--------|------|-------|
| 11     | 78.6 | A-PASNGR CAR/STA WAGON      | 7      | 50.0 | A-STOPPED                  | 0      | 0.0  | 0     |
| 0      | 0.0  | B-PASNGR CAR W/TRAILER      | 5      | 35.7 | B-PROCEEDED STRAIGHT       | 0      | 0.0  | 0     |
| C      | 0.0  | C-MOTORCYCLE                | 1      | 7.1  | C-PAN OFF ROAD             | 0      | 0.0  | 0     |
| 42.9   | 42.9 | D-PICKUP/PANEL TRUCK        | 1      | 7.1  | D-MAKING RUGHT TURN        | 0      | 0.0  | 0     |
| 6      | 0.0  | E-PICKUP/PANEL W/TRAILER    | 2      | 14.3 | E-MAKING LEFT TURN         | 2      | 14.3 | 0     |
| 0      | 0.0  | F-TRUCK/TRUCK TRACTOR       | 0      | 0.0  | F-MAKING U TURN            | 1      | 7.1  | 0     |
| 0      | 0.0  | G-TRUCK/TRACTOR & 1 TRAILER | 0      | 0.0  | G-BACKING                  | 0      | 0.0  | 0     |
| 14.3   | 14.3 | 2-TRUCK/TRACTOR & 2 TRAILER | 1      | 7.1  | H-SLOWING, STOPPING        | 0      | 0.0  | 0     |
| 0      | 0.0  | 3-TRUCK/TRACTOR & 3 TRAILER | 3      | 21.4 | I-PASS OTHER VEHICLE       | 0      | 0.0  | 0     |
| 0      | 0.0  | 4-SINGLE UNIT TANKER        | 1      | 7.1  | J-CHANGING LANES           | 0      | 0.0  | 0     |
| 0      | 0.0  | 5-TRUCK/TRA & 1 TANK TRAIL  | 0      | 0.0  | K-PARKING                  | 0      | 0.0  | 0     |
| 0      | 0.0  | 6-TRUCK/TRA & 2 TANK TRAIL  | 0      | 0.0  | L-ENTER FROM SHLDR         | 0      | 0.0  | 0     |
| 0      | 0.0  | H-SCHOOL BUS                | 1      | 7.1  | M-OTHER UNSAFE TURN        | 0      | 0.0  | 0     |
| 0      | 0.0  | I-OTHER BUS                 | 0      | 0.0  | N-CROSS INTO OPP LN        | 0      | 0.0  | 0     |
| 0      | 0.0  | J-EMERGENCY VEHICLE         | 0      | 0.0  | O-PARKED                   | 0      | 0.0  | 0     |
| 0      | 0.0  | K-HIGHWAY CONST EQUIP.**    | 0      | 0.0  | P-MERGING                  | 0      | 0.0  | 0     |
| 0      | 0.0  | L-BICYCLE                   | 0      | 0.0  | Q-TRAVEL WRONG WAY         | 0      | 0.0  | 0     |
| 14.3   | 14.3 | M-OTHER-MOTOR VEH           | 0      | 0.0  | R-OTHER                    | 0      | 0.0  | 0     |
| 2      | 0.0  | N-OTHER-NON-MOTOR VEH       | 0      | 0.0  | <-NOT STATED               | 0      | 0.0  | 0     |
| 0      | 0.0  | O-SPILLED LOADS             | 0      | 0.0  | PEDESTRIAN                 | 0      | 0.0  | 0     |
| 0      | 0.0  | P-DISENGAGED TOW            | 0      | 0.0  | Q-UNINVOLVED VEHICLE       | 0      | 0.0  | 0     |
| 0      | 0.0  | R-MOPED                     | 0      | 0.0  | S-RUNAWAY VEHICLE          | 0      | 0.0  | 0     |
| 0      | 0.0  | T-TRAIN                     | 0      | 0.0  | T-EATING* (INATTN)         | 0      | 0.0  | 0     |
| 0      | 0.0  | U-PEDESTRIAN                | 0      | 0.0  | U-CHILDREN* (INATTN)       | 0      | 0.0  | 0     |
| 0      | 0.0  | V-DISMOUNT PEDESTRIAN       | 0      | 0.0  | V-ANIMALS* (INATTN)        | 0      | 0.0  | 0     |
| 0      | 0.0  | W-ANIMAL - LIVESTOCK        | 0      | 0.0  | W-PERSNL HYGIENE* (INATTN) | 0      | 0.0  | 0     |
| 0      | 0.0  | X-ANIMAL - DEER             | 0      | 0.0  | X-READING* (INATTN)        | 0      | 0.0  | 0     |
| 0      | 0.0  | Z-ANIMAL - OTHER            | 0      | 0.0  | <-NOT STATED               | 1      | 7.1  | 100.0 |
|        |      |                             | 0      | 0.0  | -INVALID CODES             | 0      | 0.0  | 0     |
|        |      |                             |        |      | -INVALID CODES             | 0      | 0.0  | 0     |

## &lt;-- DIRECTION OF TRAVEL --&gt;

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 0      | 0.0  | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 0      | 0.0  | S-S, SE, SW BOUND | 0      | 0.0  | B-CELL PHONE IN USE*       |
| 7      | 50.0 | E-EASTBOUND       | 13     | 92.9 | C-CELL PHONE NOT IN USE*   |
| 6      | 42.9 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 1      | 7.1  | <-NOT STATED      | 1      | 7.1  | <-NOT STATED               |
| 0      | 0.0  | --DOES NOT APPLY  | 0      | 0.0  | --DOES NOT APPLY           |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

\*\* INCLUDES EQUIPMENT ENGAGED IN CONST/MAINT  
ACTIVITIES AS OF 00-02-22

## &lt;-- SPECIAL INFORMATION --&gt;

| NUMBER | PCT  | CODE                       |
|--------|------|----------------------------|
| 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 0      | 0.0  | B-CELL PHONE IN USE*       |
| 13     | 92.9 | C-CELL PHONE NOT IN USE*   |
| 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |

## &lt;-- OTHER ASSOCIATED FACTORS --&gt;

\* INATTENTION CODES EFF. 01-01-01

## &lt;-- OTHER ASSOCIATED FACTORS --&gt;

\* INATTENTION CODES EFF. 01-01-01

\* SPECIAL INFORMATION CODES EFF. 04-01-01

| <----- OBJECT STRUCK -----> |      |               |     | <----- LOCATION OF COLLISION -----> |                   |               |                |
|-----------------------------|------|---------------|-----|-------------------------------------|-------------------|---------------|----------------|
| PRIMARY NUMBER              | PCT  | OTHERS NUMBER | PCT | PRIMARY NUMBER                      | PCT               | OTHERS NUMBER | PCT            |
| 0                           | 0.0  | 0             | 0.0 | 01-SIDE OF BRIDGE RAILING           | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 02-END OF BRIDGE RAILING            | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 03-PIER, COLUMN, ABUTMENT           | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 04-BOTTOM OF STRUCTURE              | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 05-BRIDGE END POST IN GORE          | 2                 | 14.3          | 0              |
| 0                           | 0.0  | 0             | 0.0 | 06-END OF GUARD RAIL                | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 07-BRIDGE APPROACH GUARD RAIL       | 7                 | 50.0          | 1              |
| 3                           | 21.4 | 0             | 0.0 | 10-LIGHT OR SIGNAL POLE             | 1                 | 7.1           | 0              |
| 0                           | 0.0  | 0             | 0.0 | 11-UTILITY POLE                     | 5                 | 35.7          | 1              |
| 0                           | 0.0  | 0             | 0.0 | 12-POLE (TYPE NOT STATED)           | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 1             | 7.1 | 13-TRAFFIC SIGN/SIGN POST           | 2                 | 14.3          | 0              |
| 0                           | 0.0  | 0             | 0.0 | 14-OTHER SIGNS NOT TRAFFIC          | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 15-GUARDRAIL                        | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 16-MEDIAN BARRIER                   | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 17-WALL (EXCEPT SOUND WALL)         | 1                 | 7.1           | 14             |
| 0                           | 0.0  | 0             | 0.0 | 18-DIKE OR CURB                     | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 19-TRAFFIC ISLAND                   | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 20-RAISED BARS                      | 0                 | 0.0           | -INVALID CODES |
| 0                           | 0.0  | 0             | 0.0 | 21-CONCRETE OBJ (HDWL, D.I.)        | 0                 | 0.0           |                |
| 0                           | 0.0  | 0             | 0.0 | 22-GUIDEPOST, CULVERT, FM           | 0                 | 0.0           |                |
| 1                           | 7.1  | 0             | 0.0 | 23-CUT SLOPES OR EMBANKMENT         | 0                 | 0.0           |                |
| 0                           | 0.0  | 0             | 0.0 | 24-OVER EMBANKMENT                  | 0                 | 0.0           |                |
| 0                           | 0.0  | 0             | 0.0 | 25-IN WATER                         | 0                 | 0.0           |                |
| 0                           | 0.0  | 0             | 0.0 | 26-DRAINAGE DITCH                   | 0                 | 0.0           |                |
| 0                           | 0.0  | 0             | 0.0 | 27-FENCE                            | 9                 | 64.3          | 0              |
| 0                           | 0.0  | 0             | 0.0 | 28-TREES                            | 2                 | 14.3          | 0              |
| 0                           | 0.0  | 0             | 0.0 | 29-PLANTS                           | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 30-SOUND WALL                       | 1                 | 7.1           | 0              |
| 0                           | 0.0  | 0             | 0.0 | 40-NATURAL MATRL ON ROAD            | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 41-TEMP BARRICADES, CONES           | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 42-OTHER OBJECT ON ROAD             | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 43-OTHER OBJECT OFF ROAD            | 0                 | 0.0           | 0.0            |
| 1                           | 7.1  | 0             | 0.0 | 44-OVERTURNED                       | 4                 | 28.6          | 0              |
| 0                           | 0.0  | 0             | 0.0 | 45-CRASH CUSHION (SAND)             | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 46-CRASH CUSHION (OTHER)            | 0                 | 0.0           | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 51-CALL BOX                         | 0                 | 0.0           | 14             |
| 0                           | 0.0  | 0             | 0.0 | 98-UNKNOWN OBJECT STRUCK            | 0                 | 0.0           | 0.0            |
| 1                           | 7.1  | 0             | 0.0 | 99- NO OBJECT INVOLVED              | 0                 | 0.0           | 0.0            |
| 8                           | 57.1 | 1             | 7.1 | V1 THRU V9 VEHICLE 1 TO 9           | << NOT STATED     | 0             | 0.0            |
| 0                           | 0.0  | 0             | 0.0 | 100.0                               | -- DOES NOT APPLY | 0             | 0.0            |
| 1                           | 7.1  | 14            | 0.0 | 0.0                                 | - INVALID CODES   | 0             | 0.0            |

# OTM22130

## Table B - Selective Accident Rate Calculation

### Report Parameters-

Event ID: 2890970

Request Name: TRUNG 584

Ref Date: 03/11/2010

| Request-<br>& Line | L          | D       | L | I          | S       | Route/Location | Begin Date | End Date  | Rate<br>Type | Out<br>Seq | Override ADT |      |      | Req.<br>Cross | Com-<br>bine? | Excl<br>Ramp? |
|--------------------|------------|---------|---|------------|---------|----------------|------------|-----------|--------------|------------|--------------|------|------|---------------|---------------|---------------|
|                    | O          | C       | R | C          | C       |                |            |           |              |            | Rate         | Inj% | Fat% | Main          |               |               |
| 1 1 H T I          | 07 VEN 118 | 010.700 | - | 07 VEN 118 | 011.801 |                | 01-APR-06  | 31-MAR-09 | N            | L          |              |      |      | N             | N             | N             |

### Event Log:

Job id is : 3769 Accidents Table B Request TRUNG 584 Submitted by TTYSFAIL  
07 VEN 118 10.7 - 07 VEN 118 11.801 04/01/2006 TO 03/31/2009

OTM22130  
03/11/2010  
10:17 AM

California Department of Transportation  
Table B - Selective Accident Rate Calculation

Page# 1  
Event ID: 2890970

| Location Description   | Rate Group (RUS) | No. of Accidents / Significance |     |     |     |     |     | Pers | ADT Main X-St | Total MV+ or MVM | Actual |       |     | Average |       |     |     |
|--|------------------|---------------------------------|-----|-----|-----|-----|-----|------|---------------|------------------|--------|-------|-----|---------|-------|-----|-----|
|  |                  | Tot                             | Fat | Inj | F+I | Veh | Wet |      |               |                  | Fat    | F+I   | Tot | Fat     | F+I   | Tot |     |
| 07 VEN 118 010.700 - 07 VEN 118 011.800<br>0001-0001 2006-04-01 36 mo. | 1.101 MH 02 R    | 54                              | 0   | 18  | 18  | 45  | 0   | 12   | 0             | 16.7             | 20.19  | 0.000 | .89 | 2.68    | 0.025 | .33 | .77 |

Accident Rates expressed as: # of accidents / Million vehicle miles  
+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).  
For Ramps RUS only considers R(Rural) U(Urban)

*California Department of Transportation*

OTM22215

**TSAR - ACCIDENT SUMMARY**

**REPORT PARAMETERS:**

REPORT DATE : 03/11/2010  
REFERENCE DATE : 03/11/2010  
SUBMITTOR : T7YSFAIL  
REPORT TITLE : \* ALL ACCIDENTS ON VEN-118, PM 10.70 /  
EVENT ID : 11.80, FOR TIME PERIOD 4/1/06 THRU  
              3/31/09, TRUNG DUONG, LOG #584  
LOCATION CRITERIA:  
              2890963

FROM: 07-VEN-118 010.700 TO: 07-VEN-118 011.801

**SELECTION CRITERIA:**

**Accidents Date Range:**

From -- 04/01/2006 To -- 03/31/2009



| <-- PRIMARY COLLISION FACTOR --> |      |                     | <--- TYPE OF COLLISION ---> |      |                   | <---- ROADWAY CONDITION ----> |       |                         |
|----------------------------------|------|---------------------|-----------------------------|------|-------------------|-------------------------------|-------|-------------------------|
| NUMBER                           | PCT  | CODE                | NUMBER                      | PCT  | CODE              | NUMBER                        | PCT   | CODE                    |
| 3                                | 5.5  | 1-INFLUENCE ALCOHOL | 0                           | 0.0  | A-HEAD-ON         | 0                             | 0.0   | A-HOLES, RUTS           |
| 0                                | 0.0  | 2-FOLLOW TOO CLOSE  | 2                           | 3.6  | B-SIDESWIPE       | 0                             | 0.0   | B-LOOSE MATERIAL        |
| 6                                | 10.9 | 3-FAILURE TO YIELD  | 38                          | 69.1 | C-REAR END        | 0                             | 0.0   | C-OBSTRUCTION ON ROAD   |
| 7                                | 12.7 | 4-IMPROPER TURN     | 7                           | 12.7 | D-BROADSIDE       | 0                             | 0.0   | D-CONSTRUCT-REPAIR-ZONE |
| 32                               | 58.2 | 5-SPEEDING          | 7                           | 12.7 | E-HIT OBJECT      | 0                             | 0.0   | E-REDUCED ROAD WIDTH    |
| 6                                | 10.9 | 6-OTHER VIOLATIONS  | 1                           | 1.8  | F-OVERTURN        | 0                             | 0.0   | F-FLOODED               |
| 0                                | 0.0  | B-IMPROPER DRIVING  | 0                           | 0.0  | G-AUTO-PEDESTRIAN | 0                             | 0.0   | G-OTHER                 |
| 0                                | 0.0  | C-OTHER THAN DRIVER | 0                           | 0.0  | H-OTHER           | 55                            | 100.0 | H-NO UNUSUAL CONDITION  |
| 1                                | 1.8  | D-UNKNOWN           | 0                           | 0.0  | <-NOT STATED      | 0                             | 0.0   | <-NOT STATED            |
| 0                                | 0.0  | E-SELL SLEEP        | 0                           | 0.0  | -INVALID CODES    | 0                             | 0.0   | -INVALID CODES          |
| 0                                | 0.0  | <-NOT STATED        | 0                           | 0.0  | -INVALID CODES    | 0                             | 0.0   | -INVALID CODES          |
| 0                                | 0.0  | -INVALID CODES      | 0                           | 0.0  | -INVALID CODES    | 0                             | 0.0   | -INVALID CODES          |

| <---- WEATHER -----> |      |                | <---- LIGHTING -----> |      |                           | <---- ROAD SURFACE -----> |       |                |
|----------------------|------|----------------|-----------------------|------|---------------------------|---------------------------|-------|----------------|
| NUMBER               | PCT  | CODE           | NUMBER                | PCT  | CODE                      | NUMBER                    | PCT   | CODE           |
| 46                   | 83.6 | A-CLEAR        | 41                    | 74.5 | A-DAY LIGHT               | 55                        | 100.0 | A-DRY          |
| 8                    | 14.5 | B-CLOUDY       | 2                     | 3.6  | B-DUSK/DAWN               | 0                         | 0.0   | B-WET          |
| 0                    | 0.0  | C-RAINING      | 3                     | 5.5  | C-DARK-STREET LIGHT       | 0                         | 0.0   | C-SNOWY, ICY   |
| 0                    | 0.0  | D-SNOWING      | 8                     | 14.5 | D-DARK-NO STREET LIGHT    | 0                         | 0.0   | D-SLIPPERY     |
| 1                    | 1.8  | E-FOG          | 0                     | 0.0  | E-DARK-INOPR STREET LIGHT | 0                         | 0.0   | <-NOT STATED   |
| 0                    | 0.0  | F-OTHER        | 0                     | 0.0  | F-DARK-NOT STATED         | 0                         | 0.0   | -INVALID CODES |
| 0                    | 0.0  | G-WIND         | 1                     | 1.8  | <-NOT STATED              | 0                         | 0.0   | -INVALID CODES |
| 0                    | 0.0  | <-NOT STATED   | 0                     | 0.0  | -INVALID CODES            | 0                         | 0.0   | -INVALID CODES |
| 0                    | 0.0  | -INVALID CODES | 0                     | 0.0  | -INVALID CODES            | 0                         | 0.0   | -INVALID CODES |

| <---- HIGHWAY GROUP -----> |      |                           | <-- INTERSECTION/RAMP ACCIDENT LOCATION --> |       |                    |    |      |                                  |
|----------------------------|------|---------------------------|---|-------|--------------------|----|------|----------------------------------|
| NUMBER                     | PCT  | CODE                      | NUMBER                                      | PCT   | CODE               |    |      |                                  |
| 14                         | 25.5 | A-CONTROL FUNCTIONING     | 0   | 0.0   | R-IND. ALIGN RIGHT | 0  | 0.0  | 1-RAMP INTERSECTION (EXIT)       |
| 0                          | 0.0  | B-CONTROL NOT FUNCTIONING | 0   | 0.0   | L-IND. ALIGN LEFT  | 0  | 0.0  | 2-RAMP                           |
| 0                          | 0.0  | C-CONTROLS OBSCURED       | 0   | 0.0   | D-DIVIDED          | 0  | 0.0  | 3-RAMP ENTRY                     |
| 41                         | 74.5 | D-NO CONTROLS PRESENT     | 55  | 100.0 | U-UNDIVIDED        | 0  | 0.0  | 4-RAMP AREA, INTERSECTION STREET |
| 0                          | 0.0  | <-NOT STATED              | 0   | 0.0   | -INVALID CODES     | 3  | 5.5  | 5-IN INTERSECTION                |
| 0                          | 0.0  | -INVALID CODES            | 1   | 1.8   | -INVALID CODES     | 1  | 1.8  | 6-OUTSIDE INTRSTC-NONSTATE RTE   |
| 0                          | 0.0  | -INVALID CODES            | 51  | 92.7  | -DOES NOT APPLY    | 51 | 92.7 | -DOES NOT APPLY                  |

| <---- PARTY TYPE ----> |      |                             | <-- MOVEMENT PRECEDING COLLISION --> |      |                            | <--- OTHER ASSOCIATED FACTORS ---> |      |                                |
|------------------------|------|-----------------------------|--------------------------------------|------|----------------------------|------------------------------------|------|--------------------------------|
| NUMBER                 | PCT  | CODE                        | NUMBER                               | PCT  | CODE                       | NUMBER                             | PCT  | CODE                           |
| 49                     | 89.1 | A-PASNGR CAR/STA WAGON      | 28                                   | 50.9 | A-STOPPED                  | 0                                  | 0.0  | 0.0 1-INFLUENCE ALCOHOL        |
| 0                      | 0.0  | B-PASNGR CAR W/TRAILER      | 39                                   | 70.9 | B-PROCEEDED STRAIGHT       | 0                                  | 0.0  | 0.0 2-FOLLOW TOO CLOSE         |
| 4                      | 7.3  | C-MOTORCYCLE                | 2                                    | 3.6  | C-RAN OFF ROAD             | 0                                  | 0.0  | 0.0 3-FAILURE TO YIELD         |
| 22                     | 40.0 | D-PICKUP/PANEL TRUCK        | 4                                    | .7.3 | D-MAKING RIGHT TURN        | 2                                  | 3.6  | 0.0 4-IMPROPER TURN            |
| 0                      | 0.0  | E-PICKUP/PANEL W/TRAILER    | 5                                    | 9.1  | E-MAKING LEFT TURN         | 3                                  | 5.5  | 0.0 5-SPEEDING                 |
| 3                      | 5.5  | F-TRUCK/TRUCK TRACTOR       | 0                                    | 0.0  | F-MAKING U TURN            | 1                                  | 1.8  | 0.0 6-OTHER VIOLATIONS         |
| 5                      | 9.1  | G-TRUCK/TRACTOR & 1 TRAILER | 0                                    | 0.0  | G-BACKING                  | 0                                  | 0.0  | 0.0 A-CELL PHONE* (INATTN)     |
| 2                      | 3.6  | H-TRUCK/TRACTOR E 2 TRAILER | 8                                    | 14.5 | H-SLOWING, STOPPING        | 0                                  | 0.0  | 0.0 B-ELECTRIC EQUIP* (INATTN) |
| 0                      | 0.0  | I-TRUCK/TRACTOR & 3 TRAILER | 5                                    | 9.1  | I-PASS OTHER VEHICLE       | 0                                  | 0.0  | 0.0 C-RADIO/CD/HDPHN* (INATTN) |
| 0                      | 0.0  | J-SINGLE UNIT TANKER        | 1                                    | 1.8  | J-CHANGING LANES           | 0                                  | 0.0  | 0.0 D-SMOKING* (INATTN)        |
| 0                      | 0.0  | K-TRUCK/TRA & 1 TANK TRAILR | 0                                    | 0.0  | K-PARKING                  | 2                                  | 3.6  | 0.0 E-VISION OBSCUREMENT       |
| 0                      | 0.0  | L-TRUCK/TRA & 2 TANK TRAILR | 3                                    | 5.5  | L-ENTER FROM SHLDR         | 4                                  | 7.3  | 0.0 F-INATTENTION - OTHER      |
| 0                      | 0.0  | H-SCHOOL BUS                | 3                                    | 5.5  | M-OTHER UNSAFE TURN        | 19                                 | 34.5 | 0.0 F-STOP & GO TRAFFIC        |
| 0                      | 0.0  | I-OTHER BUS                 | 0                                    | 0.0  | N-CROSS INTO OPP LN        | 0                                  | 0.0  | 0.0 H-ENTER/LEAVE RAMP         |
| 0                      | 0.0  | J-EMERGENCY VEHICLE         | 0                                    | 0.0  | O-PARKED                   | 0                                  | 0.0  | 0.0 I-PREVIOUS COLLISION       |
| 0                      | 0.0  | K-HIGHWAY CONST EQUIP**     | 0                                    | 0.0  | P-MERGING                  | 0                                  | 0.0  | 0.0 J-UNFAMILIAR WITH ROAD     |
| 0                      | 0.0  | L-BICYCLE                   | 0                                    | 0.0  | Q-TRAVEL WRONG WAY         | 0                                  | 0.0  | 0.0 K-DEFECT VEHICLE EQUIP     |
| 3                      | 5.5  | M-OTHER-MOTOR VEH           | 2                                    | 3.6  | R-OTHER                    | 2                                  | 1.8  | 0.0 L-UNINVOLVED VEHICLE       |
| 0                      | 0.0  | N-OTHER-NON-MOTOR VEH       | 0                                    | 0.0  | <-NOT STATED               | 0                                  | 0.0  | 0.0 M-OTHER                    |
| 0                      | 0.0  | O-SPILLED LOADS             | 0                                    | 0.0  | <-NOT STATED               | 34                                 | 61.8 | 0.0 N-NONE APPARENT            |
| 0                      | 0.0  | P-DISENGAGED TOW            | 0                                    | 0.0  | P-WIND                     | 0                                  | 0.0  | 0.0 P-WIND                     |
| 0                      | 0.0  | Q-UNINVOLVED VEHICLE        | 0                                    | 0.0  | R-RAMP ACCIDENT            | 0                                  | 0.0  | 0.0 R-RAMP ACCIDENT            |
| 0                      | 0.0  | R-MOPED                     | 0                                    | 0.0  | S-RUNAWAY VEHICLE          | 1                                  | 1.8  | 0.0 S-RUNAWAY VEHICLE          |
| 0                      | 0.0  | T-TRAIN                     | 0                                    | 0.0  | U-CHILDREN* (INATTN)       | 0                                  | 0.0  | 0.0 U-CHILDREN* (INATTN)       |
| 0                      | 0.0  | U-PEDESTRIAN                | 0                                    | 0.0  | V-ANIMALS* (INATTN)        | 0                                  | 0.0  | 0.0 V-ANIMALS* (INATTN)        |
| 0                      | 0.0  | V-DISMOUNT PEDESTRIAN       | 0                                    | 0.0  | W-PERSNL HYGIENE* (INATTN) | 0                                  | 0.0  | 0.0 W-PERSNL HYGIENE* (INATTN) |
| 0                      | 0.0  | W-ANIMAL - LIVESTOCK        | 0                                    | 0.0  | X-ANIMAL - DEER            | 0                                  | 0.0  | 0.0 X-READING* (INATTN)        |
| 0                      | 0.0  | Z-ANIMAL - OTHER            | 0                                    | 0.0  | Z-ANIMAL - OTHER           | 0                                  | 0.0  | 0.0 Z-NOT STATED               |
| 0                      | 0.0  | O-SPILLED LOADS             | 0                                    | 0.0  | P-INVALID CODES            | 0                                  | 0.0  | 0.0 -DOES NOT APPLY            |
| 0                      | 0.0  | P-DISENGAGED TOW            | 0                                    | 0.0  | Q-UNINVOLVED VEHICLE       | 0                                  | 0.0  | 0.0 -INVALID CODES             |
| 0                      | 0.0  | R-MOPED                     | 0                                    | 0.0  | T-TRAIN                    | 0                                  | 0.0  | 0.0 -NOT STATED                |
| 0                      | 0.0  | U-PEDESTRIAN                | 0                                    | 0.0  | V-ANIMALS* (INATTN)        | 0                                  | 0.0  | 0.0 -NOT STATED                |
| 0                      | 0.0  | W-ANIMAL - LIVESTOCK        | 0                                    | 0.0  | X-ANIMAL - DEER            | 0                                  | 0.0  | 0.0 -NOT STATED                |
| 0                      | 0.0  | Z-ANIMAL - OTHER            | 0                                    | 0.0  | P-INVALID CODES            | 0                                  | 0.0  | 0.0 -NOT STATED                |

## &lt;---- DIRECTION OF TRAVEL ----&gt;

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 2      | 3.6  | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 4      | 7.3  | S-S, SE, SW BOUND | 0      | 0.0  | B-CELL PHONE IN USE*       |
| 27     | 49.1 | E-EASTBOUND       | 54     | 98.2 | C-CELL PHONE NOT IN USE*   |
| 31     | 56.4 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 1      | 1.8  | <-NOT STATED      | 2      | 3.6  | <-NOT STATED               |
| 0      | 0.0  | -DOES NOT APPLY   | 0      | 0.0  | -DOES NOT APPLY            |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

## &lt;---- SPECIAL INFORMATION ----&gt;

| NUMBER | PCT | CODE                       |
|--------|-----|----------------------------|
| 2      | 0.0 | A-HAZARDOUS MATERIALS      |
| 4      | 0.0 | B-CELL PHONE IN USE*       |
| 27     | 0.0 | C-CELL PHONE NOT IN USE*   |
| 31     | 0.0 | D-CELL PHONE NONE/UNKNOWN* |
| 1      | 0.0 | <-NOT STATED               |
| 0      | 0.0 | -DOES NOT APPLY            |
| 0      | 0.0 | -INVALID CODES             |

## &lt;---- OTHER ASSOCIATED FACTORS ----&gt;

\* INATTENTION CODES EFF. 01-01-01

\*\* INCLUDES EQUIPMENT ENGAGED IN CONST/MAINT  
ACTIVITIES AS OF 00-02-22

\* SPECIAL INFORMATION CODES EFF. 04-01-01

| <----- OBJECT STRUCK -----> |      |               |       | <----- LOCATION OF COLLISION -----> |                |               |               |                  |
|-----------------------------|------|---------------|-------|-------------------------------------|----------------|---------------|---------------|------------------|
| PRIMARY NUMBER              | PCT  | OTHERS NUMBER | PCT   | CODE                                | PRIMARY NUMBER | OTHERS NUMBER | PCT           | CODE             |
| 0                           | 0.0  | 0             | 0.0   | 01-SIDE OF BRIDGE RAILING           | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 02-END OF BRIDGE RAILING            | 1              | 1.8           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 03-PIER, COLUMN, ABUTMENT           | 1              | 1.8           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 04-BOTTOM OF STRUCTURE              | 5              | 9.1           | 2             | 3.6              |
| 0                           | 0.0  | 0             | 0.0   | 05-BRIDGE END POST IN GORE          | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 06-END OF GUARD RAIL                | 42             | 76.4          | 10            | 18.2             |
| 0                           | 0.0  | 0             | 0.0   | 07-BRIDGE APPROACH GUARD RAIL       | 1              | 1.8           | 2             | 3.6              |
| 3                           | 5.5  | 0             | 0.0   | 10-LIGHT OR SIGNAL POLE             | 10             | 18.2          | 5             | 9.1              |
| 1                           | 1.8  | 1             | 1.8   | 11-UTILITY POLE                     | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 12-POLE (TYPE NOT STATED)           | 1              | 1.8           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 13-TRAFFIC SIGN/SIGN POST           | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 14-OTHER SIGNS NOT TRAFFIC          | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 15-GUARDRAIL                        | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 16-MEDIAN BARRIER                   | 10             | 18.2          | 55            | 100.0            |
| 0                           | 0.0  | 0             | 0.0   | 17-WALL (EXCEPT SOUND WALL)         | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 18-DIKE OR CURB                     | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 19-TRAFFIC ISLAND                   | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 20-RAISED BARS                      | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 21-CONCRETE OBJ (HDWL, D.I.)        | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 22-OUTDEPOSIT, CULVERT, PM          | 1              | 1.8           | 0             | 0.0              |
| 1                           | 1.8  | 0             | 0.0   | 23-CUT SLOPE OR EMBANKMENT          | 1              | 1.8           | 2             | 3.6              |
| 1                           | 1.8  | 0             | 0.0   | 24-OVER EMBANKMENT                  | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 25-IN WATER                         | 1              | 1.8           | 0             | 0.0              |
| 1                           | 1.8  | 0             | 0.0   | 26-DRAINAGE DITCH                   | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 27-FENCE                            | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 28-TREES                            | 50             | 90.9          | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 29-PLANTS                           | 3              | 5.5           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 30-SOUND WALL                       | 1              | 1.8           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 40-NATURAL MATRL ON ROAD            | 1              | 1.8           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 41-TEMP BARRICADES, CONES           | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 42-OTHER OBJECT ON ROAD             | 0              | 0.0           | 0             | 0.0              |
| 1                           | 1.8  | 2             | 3.6   | 43-OTHER OBJECT OFF ROAD            | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 4             | 7.3   | 44-OVERTURNED                       | 8              | 14.5          | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 45-CRASH CUSHION (SAND)             | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 46-CRASH CUSHION (OTHER)            | 0              | 0.0           | 0             | 0.0              |
| 0                           | 0.0  | 0             | 0.0   | 51-CALL BOX                         | 0              | 0.0           | 55            | 100.0            |
| 0                           | 0.0  | 0             | 0.0   | 98-UNKNOWN OBJECT SPRUCK            | 0              | 0.0           | 0             | 0.0              |
| 1                           | 1.8  | 0             | 0.0   | 99- NO OBJECT INVOLVED              | 0              | 0.0           | 0             | 0.0              |
| 46                          | 83.6 | 10            | 18.2  | V1 THRU V9 VEHICLE 1 TO 9           | 18.2           | 100.0         | << NOT STATED | - DOES NOT APPLY |
| 0                           | 0.0  | 0             | 0.0   | --                                  | 100.0          | 0             | 0.0           | - INVALID CODES  |
| 10                          | 18.2 | 55            | 100.0 | --                                  | 100.0          | 0             | 0.0           | - INVALID CODES  |

| <----- DRUG/PHYSICAL -----> |     |               |     |                             |
|-----------------------------|-----|---------------|-----|-----------------------------|
| PRIMARY NUMBER              | PCT | OTHERS NUMBER | PCT | CODE                        |
| 0                           | 0.0 | 0             | 0.0 | A-HAD NOT BEEN DRINKING     |
| 0                           | 0.0 | 0             | 0.0 | B-HBD - UNDER INFLUENCE     |
| 0                           | 0.0 | 0             | 0.0 | C-HBD - NOT UNDER INFLUENCE |
| 0                           | 0.0 | 0             | 0.0 | D-HBD - IMPAIRMENT UNKNOWN  |
| 0                           | 0.0 | 0             | 0.0 | E-UNDER DRUG INFLUENCE      |
| 0                           | 0.0 | 0             | 0.0 | F-OTHER PHYSICAL IMPAIRMENT |
| 0                           | 0.0 | 0             | 0.0 | G-IMPAIRMENT NOT KNOWN      |
| 0                           | 0.0 | 0             | 0.0 | H-NOT APPLICABLE            |
| 0                           | 0.0 | 0             | 0.0 | I-FATIGUE                   |
| 0                           | 0.0 | 0             | 0.0 | < NOT STATED                |
| 0                           | 0.0 | 0             | 0.0 | - DOES NOT APPLY            |
| 0                           | 0.0 | 0             | 0.0 | - INVALID CODES             |

OTM22130

*Table B - Selective Accident Rate Calculation*

**Report Parameters:**

Event ID: 2890972

Request Name: TRUNG 585

Ref Date: 03/11/2010

| Request-<br>& Line | L | D | L | I | S          | C       | R | C          | Route/Location |           |           | Begin Date | End Date | Rate Type | Override Rates |       |      | Override ADT |   |   | Req. | Com- | Excel |
|--------------------|---|---|---|---|------------|---------|---|------------|----------------|-----------|-----------|------------|----------|-----------|----------------|-------|------|--------------|---|---|------|------|-------|
|                    |   |   |   |   |            |         |   |            | Out Seq        | Rate      | Inj%      |            |          |           | Main           | Cross | Type | Ramp?        |   |   |      |      |       |
| 1                  | 1 | H | T | 1 | 07 VEN 034 | 016.800 | - | 07 VEN 034 | 017.663        | 01-APR-06 | 31-MAR-09 | N          | L        |           |                |       |      | N            | N | N |      |      |       |

**Event Log:**

*Job id is : 3772 Accidents Table B Request TRUNG 585 Submitted by TTYSFAIL  
07 VEN 034 16.8 - 07 VEN 034 17.663 04/01/2006 TO 03/31/2009*

| Location Description  | Rate Group (RUS)   | No. of Accidents / Significance |     |     |     |           |     | Pers | ADT Main X-St | Total MV+ or MVM | Actual |       |     | Accident Rates |       |     |      |
|---|--------------------|---------------------------------|-----|-----|-----|-----------|-----|------|---------------|------------------|--------|-------|-----|----------------|-------|-----|------|
|   |                    | Tot                             | Fat | Inj | F+I | Multi Veh | Wet |      |               |                  | Fat    | F+I   | Tot | Fat            | F+I   | Tot |      |
| 07 VEN 034 016.860 - 07 VEN 034 017.662<br>0001-0001 2006-04-01 36 mo. 2009-03-31 | .863 MI H 09 S H99 | 41                              | 0   | 10  | 10  | 26        | 13  | 11   | 0             | 13.2             | 12.47  | 0.000 | .80 | 3.29           | 0.016 | .52 | 1.35 |

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

*California Department of Transportation*

OTM22215

**TSAR - ACCIDENT SUMMARY**

**REPORT PARAMETERS:**

REPORT DATE : 03/11/2010  
REFERENCE DATE : 03/11/2010  
SUBMITTOR : T7YSSFAIL  
REPORT TITLE : ALL ACCIDENTS ON VEN-034, PM 16.80 /  
EVENT ID : 17.663, FOR TIME PERIOD 4/1/06 THRU  
              3/31/09, TRUNG DUONG, LOG #585  
LOCATION CRITERIA:  
              2890965

FROM: 07-VEN-034 016.800 TO: 07-VEN-034 017.663

**SELECTION CRITERIA:**

**Accidents Date Range:**

From -- 04/01/2006 To -- 03/31/2009

| TOTAL ACCIDENTS |     |     | FATAL   | INJURY | PDO | KILLED | INJURED         | PERSONS INVOLVED | MOTOR VEHICLES INVOLVED | NUMBER | PCT  | CODE         | NUMBER | PCT  | CODE        |  |
|-----------------|-----|-----|---------|--------|-----|--------|-----------------|------------------|-------------------------|--------|------|--------------|--------|------|-------------|--|
| HOUR OF DAY     |     |     | PCT     | CODE   |     |        |                 |                  |                         |        |      |              |        |      |             |  |
| ACCESS CONTROL  |     |     | PCT     | CODE   |     |        |                 |                  |                         |        |      |              |        |      |             |  |
| 41              | 0   | 10  | 31      | 0      |     |        |                 |                  |                         | 1.5    | 36.6 | 1            | 15     | 36.6 | 1           |  |
| 0               | 0   | 0   | 0       | 0      |     |        |                 |                  |                         | 24     | 58.5 | 2            | 24     | 58.5 | 2           |  |
| 1               | 2.4 | 01- | 1 A.M.  |        | 0   | 0.0    | C-CONVENTIONAL  |                  |                         | 2      | 4.9  | 3            | 2      | 4.9  | 3           |  |
| 1               | 2.4 | 02- | 2 A.M.  |        | 0   | 0.0    | E-EXPRESSWAY    |                  |                         | 3      | 0.0  | 4            | 0      | 0.0  | 4           |  |
| 2               | 4.9 | 03- | 3 A.M.  |        | 0   | 0.0    | F-FREEWAY       |                  |                         | 0      | 0.0  | 5            | 0      | 0.0  | 5           |  |
| 1               | 2.4 | 04- | 4 A.M.  |        | 0   | 0.0    | S-1 WAY CITY ST |                  |                         | >3     |      |              | 0      | 0.0  | 6           |  |
| 1               | 2.4 | 05- | 5 A.M.  |        | 0   | 0.0    | --INVALID DATA  |                  |                         |        |      |              | 0      | 0.0  | 7           |  |
| 1               | 2.4 | 06- | 6 A.M.  |        | 0   | 0.0    | +NO DATA        |                  |                         |        |      |              | 0      | 0.0  | 8           |  |
| 3               | 7.3 | 07- | 7 A.M.  |        |     |        |                 |                  |                         |        |      |              | 0      | 0.0  | 9           |  |
| 2               | 4.9 | 08- | 8 A.M.  |        |     |        |                 |                  |                         |        |      |              |        |      |             |  |
| 2               | 4.9 | 09- | 9 A.M.  |        |     |        |                 |                  |                         |        |      |              |        |      |             |  |
| 1               | 2.4 | 10- | 10 A.M. |        |     |        |                 |                  |                         |        |      |              |        |      |             |  |
| 3               | 7.3 | 11- | 11 A.M. |        |     |        |                 |                  |                         |        |      |              |        |      |             |  |
| 3               | 7.3 | 12- | 12 NOON |        |     |        |                 |                  |                         |        |      |              |        |      |             |  |
| 1               | 2.4 | 12- | 1 P.M.  |        | 0   | 0.0    | 1999            |                  |                         | 5      | 12.2 | 01-JANUARY   | 2      | 41.9 | 1-SUNDAY    |  |
| 4               | 9.8 | 13- | 2 P.M.  |        | 0   | 0.0    | 2000            |                  |                         | 4      | 9.8  | 02-FEBRUARY  | 5      | 12.2 | 2-MONDAY    |  |
| 4               | 9.8 | 14- | 3 P.M.  |        | 0   | 0.0    | 2001            |                  |                         | 1      | 2.4  | 03-MARCH     | 4      | 9.8  | 3-TUESDAY   |  |
| 3               | 7.3 | 15- | 4 P.M.  |        | 0   | 0.0    | 2002            |                  |                         | 1      | 9.8  | 04-APRIL     | 9      | 22.0 | 4-WEDNESDAY |  |
| 3               | 7.3 | 16- | 5 P.M.  |        | 0   | 0.0    | 2003            |                  |                         | 4      | 2.4  | 05-MAY       | 11     | 26.8 | 5-THURSDAY  |  |
| 3               | 7.3 | 17- | 6 P.M.  |        | 0   | 0.0    | 2004            |                  |                         | 1      | 12.2 | 06-JUNE      | 5      | 12.2 | 6-FRIDAY    |  |
| 0               | 0.0 | 18- | 7 P.M.  |        | 0   | 0.0    | 2005            |                  |                         | 3      | 7.3  | 07-JULY      | 5      | 12.2 | 7-SATURDAY  |  |
| 0               | 0.0 | 19- | 8 P.M.  |        | 7   | 17.1   | 2006            |                  |                         | 2      | 4.9  | 08-AUGUST    |        |      |             |  |
| 3               | 7.3 | 20- | 9 P.M.  |        | 19  | 46.3   | 2007            |                  |                         | 3      | 7.3  | 09-SEPTEMBER |        |      |             |  |
| 0               | 0.0 | 21- | 10 P.M. |        | 13  | 31.7   | 2008            |                  |                         | 1      | 2.4  | 10-OCTOBER   |        |      |             |  |
| 1               | 2.4 | 22- | 11 P.M. |        | 1   | 4.9    | 2009            |                  |                         | 6      | 14.6 | 11-NOVEMBER  |        |      |             |  |
| 1               | 2.4 | 23- | UNKNOWN |        | 0   | 0.0    | 2010            |                  |                         | 6      | 14.6 | 12-DECEMBER  |        |      |             |  |

| <-- PRIMARY COLLISION FACTOR --> |      |                     | <-- TYPE OF COLLISION --> |      |                   | <-- ROADWAY CONDITION --> |       |                         |
|----------------------------------|------|---------------------|---------------------------|------|-------------------|---------------------------|-------|-------------------------|
| NUMBER                           | PCT  | CODE                | NUMBER                    | PCT  | CODE              | NUMBER                    | PCT   | CODE                    |
| 4                                | 9.8  | 1-INFLUENCE ALCOHOL | 2                         | 4.9  | A-HEAD-ON         | 0                         | 0.0   | A-HOLES, RUTS           |
| 0                                | 0.0  | 2-FOLLOW TOO CLOSE  | 3                         | 7.3  | B-SIDESWIPE       | 0                         | 0.0   | B-LOOSE MATERIAL        |
| 5                                | 12.2 | 3-FAILURE TO YIELD  | 11                        | 26.8 | C-REAR END        | 0                         | 0.0   | C-OBSTRUCTION ON ROAD   |
| 6                                | 14.6 | 4-IMPROPER TURN     | 7                         | 17.1 | D-BROADSIDE       | 0                         | 0.0   | D-CONSTRUCT-REPAIR-ZONE |
| 20                               | 48.8 | 5-SPEEDING          | 13                        | 31.7 | E-HIT OBJECT      | 0                         | 0.0   | E-REDUCED ROAD WIDTH    |
| 6                                | 14.6 | 6-OTHER VIOLATIONS  | 3                         | 7.3  | F-OVERTURN        | 0                         | 0.0   | F-FLOODED               |
| 0                                | 0.0  | B-IMPROPER DRIVING  | 0                         | 0.0  | G-AUTO-PEDESTRIAN | 0                         | 0.0   | G-OTHER                 |
| 0                                | 0.0  | C-OTHER THAN DRIVER | 2                         | 4.9  | H-OTHER           | 41                        | 100.0 | H-NO UNUSUAL CONDITION  |
| 0                                | 0.0  | D-UNKNOWN           | 0                         | 0.0  | <-NOT STATED      | 0                         | 0.0   | <-NOT STATED            |
| 0                                | 0.0  | E-FELL SLEEP        | 0                         | 0.0  | -INVALID CODES    | 0                         | 0.0   | -INVALID CODES          |
| 0                                | 0.0  | <-NOT STATED        | 0                         | 0.0  | -INVALID CODES    | 0                         | 0.0   | -INVALID CODES          |
| 0                                | 0.0  | -INVALID CODES      |                           |      |                   |                           |       |                         |

| <-- WEATHER --> |      |                | <-- LIGHTING --> |      |                           | <-- ROAD SURFACE --> |      |                |
|-----------------|------|----------------|------------------|------|---------------------------|----------------------|------|----------------|
| NUMBER          | PCT  | CODE           | NUMBER           | PCT  | CODE                      | NUMBER               | PCT  | CODE           |
| 23              | 56.1 | A-CLEAR        | 30               | 73.2 | A-DAY LIGHT               | 28                   | 68.3 | A-DRY          |
| 17              | 41.5 | B-CLOUDY       | 1                | 2.4  | B-DUSK/DAWN               | 13                   | 31.7 | B-WET          |
| 0               | 0.0  | C-RAINING      | 1                | 2.4  | C-DARK-STREET LIGHT       | 0                    | 0.0  | C-SNOWY, ICY   |
| 0               | 0.0  | D-SNOWING      | 9                | 22.0 | D-DARK-NO STREET LIGHT    | 0                    | 0.0  | D-SLIPPERY     |
| 0               | 0.0  | E-FOG          | 0                | 0.0  | E-DARK-INOPR STREET LIGHT | 0                    | 0.0  | <-NOT STATED   |
| 0               | 0.0  | F-OTHER        | 0                | 0.0  | F-DARK-NOT STATED         | 0                    | 0.0  | -INVALID CODES |
| 0               | 0.0  | G-WIND         | 0                | 0.0  | <-NOT STATED              |                      |      |                |
| 1               | 2.4  | <-NOT STATED   | 0                | 0.0  | -INVALID CODES            |                      |      |                |
| 0               | 0.0  | -INVALID CODES |                  |      |                           |                      |      |                |

| <-- HIGHWAY GROUP --> |      |                           | <-- INTERSECTION/RAMP ACCIDENT LOCATION --> |       |                    |   |     |                                  |
|-----------------------|------|---------------------------|---|-------|--------------------|---|-----|----------------------------------|
| NUMBER                | PCT  | CODE                      | NUMBER                                      | PCT   | CODE               |   |     |                                  |
| 3                     | 7.3  | A-CONTROL FUNCTIONING     | 0   | 0.0   | R-IND. ALIGN RIGHT | 0 | 0.0 | 1-RAMP INTERSECTION (EXIT)       |
| 0                     | 0.0  | B-CONTROL NOT FUNCTIONING | 0   | 0.0   | L-IND. ALIGN LEFT  | 0 | 0.0 | 2-RAMP                           |
| 0                     | 0.0  | C-CONTROLS OBSCURED       | 0   | 0.0   | D-DIVIDED          | 0 | 0.0 | 3-RAMP ENTRY                     |
| 38                    | 92.7 | D-NO CONTROLS PRESENT     | 41  | 100.0 | U-UNDIVIDED        | 0 | 0.0 | 4-RAMP AREA, INTERSECTION STREET |
| 0                     | 0.0  | <-NOT STATED              |   |       |                    | 4 | 9.8 | 5-IN INTERSECTION                |
| 0                     | 0.0  | -INVALID CODES            |   |       |                    | 0 | 0.0 | 6-OUTSIDE INTRSCT-NONSTATE RTE   |
|                       |      |                           | 37  | 90.2  | -DOES NOT APPLY    |   |     |                                  |

&lt;-- HIGHWAY GROUP --&gt;

&lt;-- INTERSECTION/RAMP ACCIDENT LOCATION --&gt;

&lt;-- PARTY TYPE --&gt;

| NUMBER | PCT  | CODE                        | <- MOVEMENT PRECEDING COLLISION -> |      |                              | #1<br>NUMBER | PCT  | CODE                  | #2<br>NUMBER | PCT | CODE                           |
|--------|------|-----------------------------|------------------------------------|------|------------------------------|--------------|------|-----------------------|--------------|-----|--------------------------------|
|        |      |                             | PCT                                | CODE | OTHER ASSOCIATED FACTORS --> |              |      |                       |              |     |                                |
| 31     | 75.6 | A-PASNGR CAR/STA WAGON      | 13                                 | 31.7 | A-STOPPED                    | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 1-INFLUENCE ALCOHOL        |
| 0      | 0.0  | B-PASNGR CAR W/TRAILER      | 23                                 | 56.1 | B-PROCEEDED STRAIGHT         | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 2-FOLLOW TOO CLOSE         |
| 0      | 0.0  | C-MOTORCYCLE                | 1                                  | 2.4  | C-RAN OFF ROAD               | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 3-FAILURE TO YIELD         |
| 18     | 43.9 | D-PICKUP/PANEL TRUCK        | 0                                  | 0.0  | D-MAKING RIGHT TURN          | 3            | 7.3  | 0                     | 0.0          | 0   | 0.0 4-IMPROPER TURN            |
| 1      | 2.4  | E-PICKUP/PANEL W/TRAILER    | 4                                  | 9.8  | E-MAKING LEFT TURN           | 3            | 7.3  | 0                     | 0.0          | 0   | 0.0 5-SPEEDING                 |
| 1      | 2.4  | F-TRUCK/TRUCK TRACTOR       | 1                                  | 2.4  | F-MAKING U TURN              | 1            | 2.4  | 0                     | 0.0          | 0   | 0.0 6-OTHER VIOLATIONS         |
| 2      | 4.9  | G-TRUCK/TRACTOR & 1 TRAILER | 2                                  | 4.9  | G-BACKING                    | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 A-CELL PHONE* (INATTN)     |
| 1      | 2.4  | 2-TRUCK/TRACTOR & 2 TRAILER | 4                                  | 9.8  | H-SLOWING, STOPPING          | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 B-ELECTRIC EQUIP* (INATTN) |
| 0      | 0.0  | 3-TRUCK/TRACTOR & 3 TRAILER | 1                                  | 2.4  | I-PASS OTHER VEHICLE         | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 C-RADIO/CD/ADPHN* (INATTN) |
| 0      | 0.0  | 4-SINGLE UNIT TANKER        | 0                                  | 0.0  | J-CHANGING LANES             | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 D-SMOKING* (INATTN)        |
| 0      | 0.0  | 5-TRUCK/TRA & 1 TANK TRAILR | 0                                  | 0.0  | K-PARKING                    | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 E-VISUAL OBSCUREMENT       |
| 0      | 0.0  | 6-TRUCK/TRA & 2 TANK TRAILR | 2                                  | 4.9  | L-ENTER FROM SHLDR           | 1            | 2.4  | 0                     | 0.0          | 0   | 0.0 F-INATTENTION - OTHER      |
| 0      | 0.0  | H-SCHOOL BUS                | 7                                  | 17.1 | M-OTHER UNSAFE TURN          | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 G-STOP & GO TRAFFIC        |
| 0      | 0.0  | I-OTHER BUS                 | 3                                  | 7.3  | N-CROSS INTO OPP LN          | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 H-ENTER/LEAVE RAMP         |
| 0      | 0.0  | J-EMERGENCY VEHICLE         | 2                                  | 4.9  | O-PARKED                     | 1            | 2.4  | 0                     | 0.0          | 0   | 0.0 I-PREVIOUS COLLISION       |
| 0      | 0.0  | K-HIGHWAY CONST EQUIP.**    | 0                                  | 0.0  | P-MERGING                    | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 J-UNFAMILIAR WITH ROAD     |
| 0      | 0.0  | L-BICYCLE                   | 0                                  | 0.0  | Q-TRAVEL WRONG WAY           | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 K-DEFECT VEHICLE EQUIP     |
| 2      | 4.9  | M-OTHER-MOTOR VEH           | 2                                  | 4.9  | R-OTHER                      | 0            | 0.0  | 0                     | 0.0          | 1   | 2.4 L-UNINVOLVED VEHICLE       |
| 0      | 0.0  | N-OTHER-NON-MOTOR VEH       | 0                                  | 0.0  | <-NOT STATED                 | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 M-OTHER                    |
| 0      | 0.0  | O-SPILLED LOADS             | 0                                  | 0.0  | P-DISENGAGED TOW             | 35           | 85.4 | 0                     | 0.0          | 0   | 0.0 N-NONE APPARENT            |
| 0      | 0.0  | Q-UNINVOLVED VEHICLE        | 0                                  | 0.0  | R-MOPED                      | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 P-WIND                     |
| 0      | 0.0  | R-MOPED                     | 0                                  | 0.0  | T-TRAIN                      | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 R-RAMP ACCIDENT            |
| 0      | 0.0  | T-TRAIN                     | 0                                  | 0.0  | U-PEDESTRIAN                 | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 S-RUNAWAY VEHICLE          |
| 0      | 0.0  | U-PEDESTRIAN                | 0                                  | 0.0  | V-DISMOUNT PEDESTRIAN        | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 T-BATING* (INATTN)         |
| 0      | 0.0  | V-DISMOUNT PEDESTRIAN       | 0                                  | 0.0  | W-ANIMAL - LIVESTOCK         | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 U-CHILDREN* (INATTN)       |
| 0      | 0.0  | W-ANIMAL - LIVESTOCK        | 0                                  | 0.0  | X-ANIMAL - DEER              | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 V-ANIMALS* (INATTN)        |
| 0      | 0.0  | X-ANIMAL - DEER             | 0                                  | 0.0  | Z-ANIMAL - OTHER             | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 W-PERSNL HYGIENE* (INATTN) |
| 0      | 0.0  | Z-ANIMAL - OTHER            | 0                                  | 0.0  | -INVALID CODES               | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 X-READING* (INATTN)        |
| 5      | 12.2 | N-N, NE, NW BOUND           | 0                                  | 0.0  | -INVALID CODES               | 2            | 4.9  | 2-XING XWALK - INTRST | 0            | 0.0 | * NOT STATED                   |
| 2      | 4.9  | S-S, SE, SW BOUND           | 1                                  | 2.4  | 3-XING XWALK - NOT INTR      | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0                            |
| 22     | 53.7 | E-EASTBOUND                 | 40                                 | 97.6 | 4-XING NOT XWALK             | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0                            |
| 21     | 51.2 | W-WESTBOUND                 | 0                                  | 0.0  | 5-ROADWAY - INCL SHLDR       | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0                            |
| 0      | 0.0  | <-NOT STATED                | 2                                  | 4.9  | 6-NOT IN ROADWAY             | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0                            |
| 0      | 0.0  | -DOES NOT APPLY             | 0                                  | 0.0  | 7-APRH-LEAVE SCHL BUS        | 0            | 0.0  | 0                     | 0.0          | 40  | 97.6 <-NOT STATED              |
| 0      | 0.0  | -INVALID CODES              | 0                                  | 0.0  | -INVALID CODES               | 0            | 0.0  | 0                     | 0.0          | 0   | 0.0 -DOES NOT APPLY            |

&lt;-- DIRECTION OF TRAVEL --&gt;

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 5      | 12.2 | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 2      | 4.9  | S-S, SE, SW BOUND | 1      | 2.4  | B-CELL PHONE IN USE*       |
| 22     | 53.7 | E-EASTBOUND       | 40     | 97.6 | C-CELL PHONE NOT IN USE*   |
| 21     | 51.2 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 0      | 0.0  | <-NOT STATED      | 2      | 4.9  | <-NOT STATED               |
| 0      | 0.0  | -DOES NOT APPLY   | 0      | 0.0  | -DOES NOT APPLY            |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

&lt;-- DIRECTION OF TRAVEL --&gt;

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 5      | 12.2 | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 2      | 4.9  | S-S, SE, SW BOUND | 1      | 2.4  | B-CELL PHONE IN USE*       |
| 22     | 53.7 | E-EASTBOUND       | 40     | 97.6 | C-CELL PHONE NOT IN USE*   |
| 21     | 51.2 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 0      | 0.0  | <-NOT STATED      | 2      | 4.9  | <-NOT STATED               |
| 0      | 0.0  | -DOES NOT APPLY   | 0      | 0.0  | -DOES NOT APPLY            |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

&lt;-- SPECIAL INFORMATION --&gt;

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 5      | 12.2 | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 2      | 4.9  | S-S, SE, SW BOUND | 1      | 2.4  | B-CELL PHONE IN USE*       |
| 22     | 53.7 | E-EASTBOUND       | 40     | 97.6 | C-CELL PHONE NOT IN USE*   |
| 21     | 51.2 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 0      | 0.0  | <-NOT STATED      | 2      | 4.9  | <-NOT STATED               |
| 0      | 0.0  | -DOES NOT APPLY   | 0      | 0.0  | -DOES NOT APPLY            |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

&lt;-- OTHER ASSOCIATED FACTORS --&gt;

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 5      | 12.2 | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 2      | 4.9  | S-S, SE, SW BOUND | 1      | 2.4  | B-CELL PHONE IN USE*       |
| 22     | 53.7 | E-EASTBOUND       | 40     | 97.6 | C-CELL PHONE NOT IN USE*   |
| 21     | 51.2 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 0      | 0.0  | <-NOT STATED      | 2      | 4.9  | <-NOT STATED               |
| 0      | 0.0  | -DOES NOT APPLY   | 0      | 0.0  | -DOES NOT APPLY            |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

&lt;-- INATTENTION CODES EFF. 01-01-01

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 5      | 12.2 | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 2      | 4.9  | S-S, SE, SW BOUND | 1      | 2.4  | B-CELL PHONE IN USE*       |
| 22     | 53.7 | E-EASTBOUND       | 40     | 97.6 | C-CELL PHONE NOT IN USE*   |
| 21     | 51.2 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 0      | 0.0  | <-NOT STATED      | 2      | 4.9  | <-NOT STATED               |
| 0      | 0.0  | -DOES NOT APPLY   | 0      | 0.0  | -DOES NOT APPLY            |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

&lt;-- SPECIAL INFORMATION --&gt;

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 5      | 12.2 | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 2      | 4.9  | S-S, SE, SW BOUND | 1      | 2.4  | B-CELL PHONE IN USE*       |
| 22     | 53.7 | E-EASTBOUND       | 40     | 97.6 | C-CELL PHONE NOT IN USE*   |
| 21     | 51.2 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 0      | 0.0  | <-NOT STATED      | 2      | 4.9  | <-NOT STATED               |
| 0      | 0.0  | -DOES NOT APPLY   | 0      | 0.0  | -DOES NOT APPLY            |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

&lt;-- SPECIAL INFORMATION CODES EFF. 04-01-01

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 5      | 12.2 | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 2      | 4.9  | S-S, SE, SW BOUND | 1      | 2.4  | B-CELL PHONE IN USE*       |
| 22     | 53.7 | E-EASTBOUND       | 40     | 97.6 | C-CELL PHONE NOT IN USE*   |
| 21     | 51.2 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 0      | 0.0  | <-NOT STATED      | 2      | 4.9  | <-NOT STATED               |
| 0      | 0.0  | -DOES NOT APPLY   | 0      | 0.0  | -DOES NOT APPLY            |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

&lt;-- SPECIAL INFORMATION CODES EFF. 04-01-01

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 5      | 12.2 | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 2      | 4.9  | S-S, SE, SW BOUND | 1      | 2.4  | B-CELL PHONE IN USE*       |
| 22     | 53.7 | E-EASTBOUND       | 40     | 97.6 | C-CELL PHONE NOT IN USE*   |
| 21     | 51.2 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 0      | 0.0  | <-NOT STATED      | 2      | 4.9  | <-NOT STATED               |
| 0      | 0.0  | -DOES NOT APPLY   | 0      | 0.0  | -DOES NOT APPLY            |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

&lt;-- SPECIAL INFORMATION CODES EFF. 04-01-01

| NUMBER | PCT  | CODE              | NUMBER | PCT  | CODE                       |
|--------|------|-------------------|--------|------|----------------------------|
| 5      | 12.2 | N-N, NE, NW BOUND | 0      | 0.0  | A-HAZARDOUS MATERIALS      |
| 2      | 4.9  | S-S, SE, SW BOUND | 1      | 2.4  | B-CELL PHONE IN USE*       |
| 22     | 53.7 | E-EASTBOUND       | 40     | 97.6 | C-CELL PHONE NOT IN USE*   |
| 21     | 51.2 | W-WESTBOUND       | 0      | 0.0  | D-CELL PHONE NONE/UNKNOWN* |
| 0      | 0.0  | <-NOT STATED      | 2      | 4.9  | <-NOT STATED               |
| 0      | 0.0  | -DOES NOT APPLY   | 0      | 0.0  | -DOES NOT APPLY            |
| 0      | 0.0  | -INVALID CODES    | 0      | 0.0  | -INVALID CODES             |

&lt;-- SPECIAL INFORMATION CODES EFF. 04-01-01

| NUMBER | PCT | CODE | NUMBER | PCT | CODE |
| --- | --- | --- | --- | --- | --- |


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| <----- OBJECT STRUCK -----> |     |               |                           | <----- LOCATION OF COLLISION -----> |                |     |                    |                              |                                |
|-----------------------------|-----|---------------|---------------------------|-------------------------------------|----------------|-----|--------------------|------------------------------|--------------------------------|
| PRIMARY NUMBER              | PCT | OTHERS NUMBER | PCT                       | CODE                                | PRIMARY NUMBER | PCT | OTHERS NUMBER      | PCT                          | CODE                           |
| 0 0.0                       | 0.0 | 0 0.0         | 0.0                       | 01-SIDE OF BRIDGE RAILING           | 0 0.0          | 0.0 | 0 0.0              | 0.0                          | A-BEYOND MEDIAN OR STRIPE-LEFT |
| 0 0.0                       | 0.0 | 0 0.0         | 0.0                       | 02-END OF BRIDGE RAILING            | 9 22.0         | 6   | 14.6               | B-BEYOND SHLDR DRIVERS LEFT  |                                |
| 0 0.0                       | 0.0 | 0 0.0         | 0.0                       | 03-PIER, COLUMN, ABUTMENT           | 0 0.0          | 0   | 0.0                | C-LEFT SHOULDER AREA         |                                |
| 0 0.0                       | 0.0 | 0 0.0         | 0.0                       | 04-BOTTOM OF STRUCTURE              | 7 17.1         | 1   | 2.4                | D-LEFT LANE                  |                                |
| 0 0.0                       | 0.0 | 0 0.0         | 0.0                       | 05-BRIDGE END POST IN GORE          | 0 0.0          | 0   | 0.0                | E-INTERIOR LANES             |                                |
| 1 2.4                       | 1   | 2.4           | 0.6                       | 06-END OF GUARD RAIL                | 23 56.1        | 3   | 7.3                | F-RIGHT LANE                 |                                |
| 0 0.0                       | 0.0 | 0 0.0         | 0.0                       | 07-BRIDGE APPROACH GUARD RAIL       | 5 12.2         | 0   | 0.0                | G-RIGHT SHOULDER AREA        |                                |
| 0 0.0                       | 0.0 | 0 0.0         | 0.0                       | 10-LIGHT OR SIGNAL POLE             | 6 14.6         | 3   | 7.3                | H-BEYOND SHLDR DRIVERS RIGHT |                                |
| 1 2.4                       | 0   | 0 0.0         | 0.0                       | 11-UTILITY POLE                     | 0 0.0          | 0   | 0.0                | I-GORE AREA                  |                                |
| 0 0.0                       | 1   | 2.4           | 12-POLE (TYPE NOT STATED) | 0 0.0                               | 0              | 0.0 | 0 0.0              | J-OTHER                      |                                |
| 1 2.4                       | 1   | 2.4           | 13-TRAFFIC SIGN/SIGN POST | 1 2.4                               | 0              | 0.0 | 0 0.0              | V-HOV LANE (S)               |                                |
| 0 0.0                       | 0.0 | 0 0.0         | 0.0                       | 14-OTHER SIGNS NOT TRAFFIC          | 0 0.0          | 0   | 0.0                | W-HOV LANE BUFFER AREA       |                                |
| 3 7.3                       | 0   | 0 0.0         | 0.0                       | 15-GUARDRAIL                        | 0 0.0          | 0   | 0.0                | <-NOT STATED                 |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 16-MEDIAN BARRIER                   | 0 0.0          | 0   | 0.0                | -DOES NOT APPLY              |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 17-WALL (EXCEPT SOUND WALL)         | 3 7.3          | 41  | 100.0              | -INVALID CODES               |                                |
| 1 2.4                       | 0   | 0 0.0         | 0.0                       | 18-DIKE OR CURB                     | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 19-TRAFFIC ISLAND                   | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 20-RAISED BARS                      | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 21-CONCRETE OBJ (HDWL, D.I.)        | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 22-GUDEPOST, CULVERT, PM            | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 23-CUT SLOPE OR EMBANKMENT          | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 24-OVER EMBANKMENT                  | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 25-IN WATER                         | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 1 2.4                       | 0   | 0 0.0         | 0.0                       | 26-DRAINAGE DITCH                   | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 6 14.6                      | 2   | 4.9           | 27-FENCE                  | 0 0.0                               | 0              | 0.0 | 0 0.0              | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 28-TREES                            | 35 85.4        | 0   | 0.0                | A-HAD NOT BEEN DRINKING      |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 29-PLANTS                           | 3 7.3          | 0   | 0.0                | B-HBD - UNDER INFLUENCE      |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 30-SOUND WALL                       | 0 0.0          | 0   | 0.0                | C-HBD - NOT UNDER INFLUENCE  |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 40-NATURAL MATRL ON ROAD            | 0 0.0          | 0   | 0.0                | D-HBD - IMPAIRMENT UNKNOWN   |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 41-TEMP BARRICADES, CONES           | 0 0.0          | 0   | 0.0                | E-UNDER DRUG INFLUENCE       |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 42-OTHER OBJECT ON ROAD             | 0 0.0          | 0   | 0.0                | F-OTHER PHYSICAL IMPAIRMENT  |                                |
| 0 0.0                       | 2   | 4.9           | 43-OTHER OBJECT OFF ROAD  | 0 0.0                               | 0              | 0.0 | G-IMPACT NOT KNOWN |                              |                                |
| 2 4.9                       | 1   | 2.4           | 44-OVERTURNED             | 4 9.8                               | 0              | 0.0 | H-NOT APPLICABLE   |                              |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 45-CRASH CUSHION (SAND)             | 2 4.9          | 0   | 0.0                | I-FATIGUE                    |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 46-CRASH CUSHION (OTHER)            | 0 0.0          | 1   | 2.4                | < NOT STATED                 |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 51-CALL BOX                         | 1 2.4          | 40  | 97.6               | -DOES NOT APPLY              |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 98-UNKNOWN OBJECT STRUCK            | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | 99- NO OBJECT INVOLVED              | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |
| 25 61.0                     | 3   | 7.3           | V1 THRU V9 VEHICLE 1 TO 9 | 0 0.0                               | 0              | 0.0 | 0 0.0              | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | << NOT STATED                       | 41 100.0       | 0   | 0.0                | -INVALID CODES               |                                |
| 3 7.3                       | 41  | 100.0         | -- DOES NOT APPLY         | 0 0.0                               | 0              | 0.0 | 0 0.0              | -INVALID CODES               |                                |
| 0 0.0                       | 0   | 0 0.0         | 0.0                       | - INVALID CODES                     | 0 0.0          | 0   | 0.0                | -INVALID CODES               |                                |

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**ATTACHMENT 7**

**LEFT TURN LANE LENGTH  
CALCULATION**

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## STATE ROUTES 118/34 AND DONLON ROAD INTERSECTION IMPROVEMENT PROJECT

### 1. Calculation for Left Turn Lane Length for Westbound State Route 118:

Year 2035 A.M. peak hour left turn volume = 480 vehicles/hour

Cycle Length = 95.5 seconds

Number of cycle/hr =  $(60 \text{ sec./min.} \times 60 \text{ min./hr}) / (95.5 \text{ sec/cycle}) = 38$

Use a safety factor of 1.75 (Highway Design Manual recommends between 1.5 to 2)

Number of vehicles/cycle =  $1.75 \times 480 / 38 = 22$

Percent of trucks = 19.9

Number of trucks:  $0.199 \times 22 = 4.4$ ; use 4

Number of cars:  $22 - 4 = 18$

Length of truck = 68 ft

Length of car = 25 ft

Storage length for truck:  $4 \times 68 \text{ ft} = 272 \text{ ft.}$

Storage length for car:  $18 \times 25 \text{ ft} = 450 \text{ ft.}$

**Total length for storage: 272 ft + 450 ft. = 722 ft.**

Deceleration length per Highway Design Manual: 435 ft. for 50 mph. Assume partial deceleration in the through lane is permitted. Posted speed limit is 55 mph.

**Total length for 1 left turn lane: 722 ft. + 435 ft. = 1157 ft.**

**Total length for 2 left turn lanes: 722 ft. / 2 + 435 ft. = 796 ft.**

### 2. Calculation for Left Turn Lane Length for Eastbound State Route 118:

Year 2035 A.M. peak hour left turn volume = 50 vehicles/hour

Cycle Length = 95.5 seconds

Number of cycle/hr =  $(60 \text{ sec./min.} \times 60 \text{ min./hr}) / (95.5 \text{ sec/cycle}) = 38$

Use a safety factor of 1.75

Number of vehicles/cycle =  $1.75 \times 50 / 38 = 2.3$ ; use 2

Percent of trucks = 25.6

Number of trucks:  $0.26 \times 2 = 0.52$ ; use 1

Number of cars:  $2 - 1 = 1$

Length of truck = 68 ft

Length of car = 25 ft

Storage length for truck:  $1 \times 68 \text{ ft} = 68 \text{ ft.}$

Storage length for car:  $1 \times 25 \text{ ft} = 25 \text{ ft.}$

**Total length for storage: 68 + 25 ft. = 93 ft.**

Deceleration length per Highway Design Manual: 435 ft. for 50 mph. Assume partial deceleration in the through lane is permitted. Posted speed limit is 55 mph.

**Total length for left turn lane: 93 ft. + 435 ft. = 528ft.**

**3. Calculation for Left Turn Lane Length for Northbound State Route 34:**

Year 2035 P.M. peak hour left turn volume = 190 vehicles/hour

Cycle Length = 91.5 seconds

Number of cycle/hr = (60 sec./min. x 60 min./hr)/(91.5 sec/cycle) = 39

Use a safety factor of 1.75

Number of vehicles/cycle =  $1.75 \times 190 / 39 = 8.5$ ; use 9

Percent of trucks = 14

Number of trucks:  $0.14 \times 9 = 1.25$ ; use 1

Number of cars:  $9 - 1 = 8$

Length of truck = 68 ft

Length of car = 25 ft

Storage length for truck:  $1 \times 68 \text{ ft} = 68 \text{ ft.}$

Storage length for car:  $8 \times 25 \text{ ft} = 200 \text{ ft.}$

**Total length for storage: 68 ft + 200 ft. = 268 ft.**

Deceleration length per Highway Design Manual: 340 ft. for 40 mph. Assume partial deceleration in the through lane is permitted.

**Total length for left turn lane: 268 ft. + 340 ft. = 608 ft.**